





# MORE MEDIA, MORE DIRECT

Simplicity is a key to superior control. Just swipe a finger to fast-forward or rewind movie or music playback with Touch Slide. Direct connections between our headunits and iPod, iPhone, USB devices and portable media players are fast and easy. 112 key illumination colors even give you a great choice of ways to personalize the display.

#### AVH-P4150DVD

7" Wide Display 2-DIN AV with USB Direct Connection

Pioneer

#### AVH-P5150DVD

7" Wide Display 1-DIN AV with USB Direct Connection

# COMMAND MORE DISPLAY COLORS

#### ▶ Selectable Screen Color & RGB Key Illumination

AVH-P5150DVD AVH-P4150DVD AVH-P3150DVD

Select among five color themes for the display and 112 colors for key panel illumination to seamlessly match your unit to your dash.



# Natural Being Nept a Lift New Xind of Life Night of the Ride

# A TOUCH OF SUPERIOR SIMPLICITY

#### ■ Touch Slide Operation

AVH-P4150DVD AVH-P3150DVD

With new Touch Slide Operation, just swipe your finger on the touch panel to fast-forward or rewind movie and music playback. The GUI (Graphic User Interface) on a wide color LCD makes file access and playback from DVD, CD, iPod or other digital device very easy, in keeping with the convenience of direct touch panel operation.

#### AVH-P3150DVD 5.8" Wide Display 2-DIN AV with Front USB Direct Connection

# **VERSATILE PERFORMANCE**

#### ■ Multiple Media Connectivity

Connect a Pioneer AV headunit to an iPod via USB, for direct control of audio and video menus, functions and selections via headunit's touch-panel display similar to iPod. This not only speeds up and simplifies file search and access—it paves the way to enjoy higherquality sound via USB digital data transfer. Also, a built-in AUX-in mini jack makes it convenient to connect a Pioneer AV headunit to an external iPod Audio, iPod Video, MP4 player, digital camera or other portable audio/video media player.









## ■ DivX® Playback

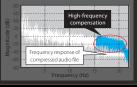
AVH-P7950DVD AVH-P5150DVD AVH-P4150DVD 

DivX® is the world's most popular high-compression digital video format and does not appreciably compromise movie picture quality. Simply burn a movie from a PC onto a long-playing Video CD or DVD, then play that disc in a Pioneer AV headunit to gain a new appreciation of in-car theater.

#### ■ Advanced Sound Retriever

AVH-P4150DVD AVH-P3150DVD DVH-P4150UB DVH-3150UB

Pioneer AV headunits use advanced sound retrieval to access high-quality audio from compressed file formats.



Sound Quality Deterioration due to Compressed Audio File

When Advanced Sound Retrieve is "ON", the high frequency range is compensated to match the frequency response curve of the original sound.





# AVH-P5150DVD

7" (16:9) Wide QVGA Fully Motorized LCD Color Display with 4-Channel High-Power DVD/VCD/CD Receiver and USB Direct Connection















































- · Direct connection for iPod (audio & video) (CD-IU205V required)
- DivX®/MP3/WMA/AAC playback on DVD and CD
  • USB direct connection: USB 2.0
- (full speed)
   Bluetooth® adapter ready
- Built-in MPEG-1/-2 decoder
   Built-in decoder (Dolby Digital,
- Linear PCM) 96 kHz/24-bit DAC (for audio)
- 10-bit video DAC
- EEQ
- –5-mode preset equalizer–1-mode custom preset equalizer
- -3-band parametric equalizer -Bass Boost
- -2-way crossover (HPF/LPF)
- -3-mode selectable loudness
- IP-Bus input 2 RCA pre-outs: front + rear/subwoofer
- (selectable)
- · A/V inputs and outputs -1 RCA Audio/Video input
- -1 RCA Video output

- · Multi-channel processor (DEQ-P7650) control (CD-DD25 required)
- External unit control via IP-Bus (2 units)
- · AUX-in by mini jack (audio & video) RGB key illumination (112 colors)





## LCD MONITOR

- 7" (16:9) QVGA wide TFT active matrix LCD color screen
- · Selectable screen color
- (Blue/Red/Amber/Green/Violet) • AG (Anti-Glare) coated LCD color
- · Automatic rear view monitoring in reverse gear (by camera\*)
- \*Camera not included

#### Direct Connection for iPod and iPhone Adds Convenience to AV Control

#### 

Connect your iPod to the AVH-P5150DVD for direct control of iPod audio and video menus, functions, and selections via on-screen touch panel. This makes song access and search extra-quick and easy.

Similarly, the AVH-P4150DVD, AVH-P3150DVD and DVH-P4150UB can be connected to an iPhone.

\*Does not apply to iPhone.









#### Advanced Sound Retriever

AVH-P4150DVD AVH-P3150DVD DVH-P4150UB DVH-3150UB

Hear the glory of original sound across a deeper, wider spectrum from highly compressed MP3, WMA and AAC files stored on USB device, iPod and portable media players. By compensating for data (especially higher frequencies) that tend to get lost in the digital compression process, Pioneer's Advanced Sound Retriever technology enhances audio reproduction nearly all the way up to 20 kHz frequencies. We can make your music sound close to CD quality.

#### Sound Quality Deterioration due to Compressed Audio File 60 40 (dB) 20 0 -20 Magn -40 Frequency response of compressed audio file -60 -80 10 Frequency (Hz) When Advanced Sound Retriever is "ON", the high frequency range is compensated to match the frequency response curve of the original sound

#### ■ Wide LCD Color Display with Touch Panel Operation



[AVH-P7950DVD] [AVH-P6050DVD] [AVH-P5150DVD] [AVH-P4150DVD] [AVH-P3150DVD\*]

The AVH-P5150DVD reproduces clear, bright DVD images on its 7-inch LCD color display. AG (Anti-Glare) screen coating prevents external light diffusion from impeding visibility. Settings, source access and playback via touch panel with GUI (Graphic User Interface) makes operation effortless.

\*5.8-inch wide.

#### ■ DivX® Playback

DVH-3150UB

AVH-P7950DVD AVH-P5150DVD AVH-P4150DVD AVH-P3150DVD DVH-P4150UB

Create a DivX® movie on a PC, burn it to a disc, and play it in-car. Pioneer's AV headunits can play DivX® video files from CDs and DVDs. The world's most popular compressed digital video format, DivX® delivers speedy transfer without appreciably compromising picture quality.



### ▶ Selectable Screen Color & RGB Key Illumination

AVH-P5150DVD AVH-P4150DVD AVH-P3150DVD

The AVH-P4150DVD will accommodate your taste or mood. Select among five (Blue/Red/Amber/Green/White) colors for display, and among 112 key illumination colors to match car interior, iPod and dashboard lighting.





# AVH-P4150DVD

7" (16:9) Wide QVGA Fully Motorized LCD Color Display with 4-Channel High-Power DVD/VCD/CD Receiver and USB Direct Connection







































-1-mode custom preset equalizer

-3-band parametric equalizer

-2-way crossover (HPF/LPF)

−1 RCA Video output

· RGB input (26-pin)

-3-mode selectable loudness

• 3 RCA pre-outs (front + rear + subwoofer) • A/V inputs and outputs —1 RCA Audio/Video input

Multi-channel processor (DEQ-P7650) control (CD-DD25 required)

• External unit control via IP-Bus (2 units)

AUX-in by mini jack (audio & video)

• RGB key illumination (112 colors)









- Built-in MPEG-1/-2 decoder
- \*Built-in decoder (Dolby Digital, Linear PCM)
- •96 kHz/24-bit DAC (for audio) • 10-bit video DAC
- · Advanced Sound Retriever
- EEQ
- –5-mode preset equalizer



-Bass Boost

• IP-Bus input

PAL / PAL-M / NTSC / SECAM







- (16:9) QVGA wide TFT active matrix LCD color screen
- AG (Anti-Glare) coated LCD color screen
- · Touch slide operation
- Selectable screen color (Blue/Red/Amber/Green/White)
- Built-in GDC (Graphics Display Controller)
- · Customizable wallpapers
- LED backlight

LCD MONITOR

- · Automatic rear view monitoring in reverse gear (by camera\*)
- \* Camera not included

## • USB direct connection: USB 2.0 (full speed) ·Bluetooth® adapter ready

■ Touch Slide Operation

• Direct connection for iPod and iPhone

(audio & video) (CD-IU200V required)

· DivXº/MP3/WMA/AAC playback on

• JPEG on CD-R/RW and USB

#### AVH-P4150DVD AVH-P3150DVD

DVD and CD

With a smooth swipe of your finger on the touch panel display, you can fast forward/rewind AV content playing from DVD-Video, DivX®, MP3/WMA/AAC and CD source formats, or scroll a list of files for you to select among.

Note: Touch slide Fast-Forward/Rewind function not available on iPod.





#### ■ Customizable Wallpapers

AVH-P4150DVD AVH-P3150DVD

Choose among 4 types of BGP (Background Picture) and 3 types of BGV (Background Visual). You can even set your favorite JPEG file as wallpaper.

Parked with no place to go? Now you can enjoy a slideshow of your photos on a CD or USB Device.



#### Link Play for iPod

(AVH-P5150DVD\*) (AVH-P4150DVD) (AVH-P3150DVD) (DVH-P4150UB)

Not in the mood for all of the kinds of music that shuffle mode can play from your iPod library? Then here's a great way to listen only to your favorite kinds. Just plug your iPod directly into the unit using the optional cable, touch the Link Play button and select specific artist, album or genre. Now, you are ready to rock and roll.

\*Artist only



#### ■ Speedier Search Using iPod and iPhone

AVH-P4150DVD AVH-P3150DVD DVH-P4150UB

Now, Pioneer's latest headunits are even easier to enjoy with an iPod. A new USB mechanism speeds up "List Search", refined processing speeds up "Alphabetical Search" for song, artist name, or album, and "Touch Slide Operation" speeds up access to any file in the connected iPod.







5.8" (16:9) Wide QVGA LCD Color Display with 4-Channel High-Power DVD/VCD/CD Receiver and USB Direct Connection









• Direct connection for iPod and iPhone (audio & video) (CD-IU50V required)

































PAL / PAL-M / NTSC / SECAM



- · Advanced Sound Retriever
- -5-mode preset equalizer
- 1-mode custom preset equalizer
- -3-band parametric equalizer —Bass Boost
- -2-way crossover (HPF/LPF)
- -3-mode selectable loudness
- IP-Bus input • 2 RCA pre-outs: front + rear/subwoofer (selectable)
- •A/V inputs and outputs —1 RCA Audio/Video input
  - -1 RCA Video output
- Multi-channel processor (DEQ-P7650) control (CD-DD25 required)







#### LCD MONITOR

- 5.8" (16:9) QVGA wide TFT active matrix LCD color screen Touch slide operation
- Selectable screen color (Blue/Red/Amber/Green/White)
- AG (Anti-Glare) coated LCD color screen · Built-in GDC (Graphics Display Controller)

• External unit control via IP-Bus (2 units)

· AUX-in by mini jack (front for audio & video) • RGB key illumination (112 colors)

- · Customizable wallpapers
- · LED backlight
- · Automatic rear view monitoring in reverse gear (by camera\*)
- \*Camera not included

#### ▶ Front AUX-In Mini Jack Connection for Audio and Video



DivX®/MP3/WMA/AAC playback on DVD and CD

• Front USB direct connection: USB 2.0 (full speed)

• Built-in decoder (Dolby Digital, Linear PCM)

• JPEG on CD-R/RW and USB

·Bluetooth® adapter ready

· Built-in MPEG-1/-2 decoder

•96 kHz/24-bit DAC (for audio)

AVH-P3150DVD DVH-P4150UB DVH-3150UB\*

Pioneer's AV headunits' AUX-in mini jacks extend playback from external iPod Audio, iPod Video, MP4 player, digital camera and other portable audio/video media players. These jacks are built into the front panel for fast, trouble-free connection.

\*Audio only



#### ▶ Picture Quality Adjustment

AVH-P4150DVD AVH-P3150DVD

In addition to LED-backlight for brighter pictures, Black Level Adjustment displays deeper black that you'll appreciate when viewing movies. Color Temperature Adjustment allows you fine-tune color quality ensuring a crisper, clearer picture.



**AVH-P7950DVD** 7" (16:9) Wide WVGA Fully Motorized LCD Color Display with 8-Channel High-Power DVD/VCD/CD Receiver













Hide-away unit 280 mm (W)  $\times$  37 mm (H)  $\times$ 





















171 mm (D)

· Built-in decoder (DTS, DTS-ES, DTS Neo:6,

DTS 96/24, Dolby Digital, Dolby Pro Logic II, Dolby Digital EX, Linear PCM) • 192 kHz/24-bit DAC (for audio) • 10-bit video DAC

Built-in DSP (Digital Signal Processor)

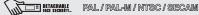
-3-mode custom preset equalizer

Digital listening position selector

-2-channel/multi-channel Auto EQ

—5-mode preset equalizer







-2-channel/multi-channel auto time



- -Multi-channel 3-band parametric equalizer (L/R independent/common)
- -Front 2-way crossover: HPF/LPF
- · Digital direct
- 6 wide screen modes (Just/Full/Cinema/Zoom/ Normal/Auto)
- 9-channel RCA pre-outs
- •External unit control via IP-Bus (2 units)
- Source DVD control (full-control)
- AUX-in by mini iack (audio)
- · Detachable lower face
- Dual-zone (two different sources) operation for front and rear ·Optical digital input
- · Joystick remote control
- 6 m cable between monitor and hide-away unit
- Multi-language guide—caution message only (English/Spanish/Portuguese/Traditional

#### HIDE-AWAY UNIT

- · A/V inputs and outputs -AV-Bus input
- -2 RCA Audio/Video
- inputs (input 1: Audio/Video, input 2: Audio/Video or rear view camera)
- -1 RCA Audio/Video output
- · 8-channel speaker output
- ·Component output (for rear screen)

#### LCD MONITOR

- (16:9) WVGA wide TFT active matrix LCD color
- Sub-Display (10-character)AG (Anti-Glare) coated LCD color screen
- ·Intelligent dimmer control
- · Virtual GUI (Graphic User Interface) · Fully motorized unit with display angle
- adjustment
- New split-screen IC
- Built-in GDC (Graphics Display Controller)
- · Automatic rear view monitoring in reverse gear (by camera\*)
- \*Camera not includea

# 2-Channel/Multi-Channel Selectable Auto Time Alignment and Auto EQ

#### AVH-P7950DVD

DivX® file playback

Adapter ready for iPodBluetooth® adapter ready

 Dual illumination (white/red) · Built-in MPEG-1/-2 decoder

• JPEG on CD-R

• MP3/WMA/AAC playback on DVD and CD

· USB adapter ready (external unit control)

Like sound engineers, Pioneer applies Auto Time Alignment to customize the front sound stage and bring out vocal impact. After a microphone measures the time it takes for sound from each speaker to reach the listener, output timing is automatically adjusted and wave interference suppressed.

The microphone also helps to monitor in-car acoustics for multi-channel Auto EQ, and the information is used to automatically equalize frequency response curves. Such innovations deliver the best sound quality you can get in a car. You can even enjoy expansive 6.1- or 5.1-channel surround sound when listening to a DVD or 2-channel CD recording.



Digital delay processing makes all speakers sound as if they are virtually equidistant from the listener, for a clearer front-focused soundstage.

#### ■ Built-In Multi-Channel Processor for 6.1-Channel Surround Sound

#### AVH-P7950DVD

The Pioneer AVH-P7950DVD enhances the experience of cinema in a car in several ways. Play 6.1-channel compatible audio/video DVDs or DTS Neo:6-compatible media to maximize the drama that a full 6.1-channel surround sound system can create. The audio effect from eight speakers (four front left and right, two rear left and right, one center, and one rear center plus an active subwoofer) is especially astounding from the perspectives of driver and front passenger. The overall sound is stable and natural, particularly in the dedicated subwoofer channel for low frequencies.





# AVH-P6050DVD

2-DIN 7" (16:9) Wide In-Dash Fully Motorized LCD Color Display with 4-Channel High-Power 6-Disc Multi-DVD/VCD/CD Receiver

Limited distribution







































- · USB adapter ready (external unit control)
- Adapter ready for iPod
- · Built-in MPEG-1/-2 decoder
- · Bluetooth® adapter ready

- Built-in decoder (Dolby Digital. Linear PCM)
- •6-disc CD/DVD changer •96 kHz/24-bit DAC (for audio)
- 10-bit video DAC
- •EEQ -5-mode preset equalizer
- -1-mode custom preset equalizer
- -3-band parametric equalizer
- -HPF
- -3-mode selectable loudness
- -4-mode staging (Music Studio/Dynamic Theater/Actor's Stage/Relax Living)
- 5 wide screen modes (Just/Full/Cinema/Zoom/Normal)
- 3 RCA pre-outs (front + rear +
- IP-Bus input

- A/V inputs and outputs
- Optical digital output (DTS, Linear PCM)
- AV-Bus input2 RCA Audio/Video inputs (input 1: Audio/Video, input 2: Audio/Video or rear view camera)
- 1 RCA Video output
- RGB input (26-pin)
- · Multi-channel processor (DEQ-P7650)
- External unit control via IP-Bus (2 units)
- · AUX-in by mini jack (audio)
- · Level indicator
- Spectrum analyzer Jovstick remote control
- Multi-language guide—caution message only (English/Spanish/ Portuguese/Traditional Chinese)

#### LCD MONITOR

- 7" wide TFT active matrix LCD color screen
- · AG (Anti-Glare) coated LCD color screen ·Virtual GUI
- (Graphic User Interface)
- Fully motorized unit with display angle adjustment
- (5 steps <STEP 0 to STEP 5>) New split-screen IC
- ·Built-in GDC (Graphics Display
- Controller) · Automatic rear view monitoring
- in reverse gear (by camera\*)
- \* Camera not included

# ■ 7-Inch Wide In-Dash Monitor with Enhanced Touch Panel



AVH-P7950DVD AVH-P6050DVD AVH-P5150DVD AVH-P4150DVD

Gaining a greater touch of control over all your in-car entertainment now gets simpler. Whether it is playing a stack of DVDs, CDs, or a connected iPod or other portable media player, these models are more than a multimedia headunit—it is a multi-operational centerpiece engineered for more direct access to the new generation of in-car entertainment. Its brilliant 7-inch-wide in-dash monitor features easy-access smudgeresistant touch panel and external light-diffusing AG (Anti-Glare) screen coating. Every image emanating from the screen is bold, clear and sharp, yet easy on the eyes.

In all, it is visibly superior to what more conventional AV command centers have to offer in overall performance and style.

### A Clear Touch Panel Makes Operation Easy







#### ■ In-Car Sound Staging

#### AVH-P6050DVD

Choose among four presets (Music Studio/Dynamic Theater/Actor's Stage/Relax Living) designed for you to listen to optimal advantage, according to the nature of your source material, acoustic environment and personal preference. Touch panel operation makes it extra-easy to select the right setting to stage your sound.

#### Screens For Four Sound Staging Presets (AVH-P6050DVD)



Music Studio







■ 6-Disc CD/DVD Changer

#### AVH-P6050DVD

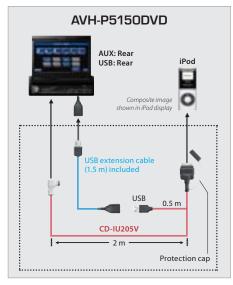
Keep the music and movie entertainment rolling without interruption for as long as you like. The CD/DVD changer section holds up to six discs. Use the touch panel to select and sequence disc tracks for playback as desired. With the 7-inch wide monitor, confirming details and data is simplicity itself.

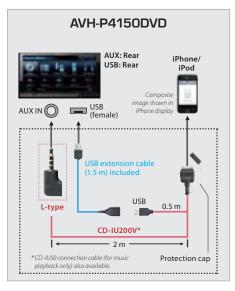






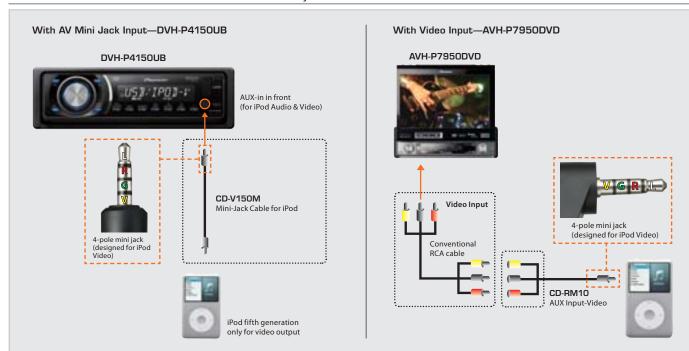








#### ■ View iPod Video Via Pioneer AV Headunits by Mini Jack



#### ■ Tips: iPod Video Setup

You will need to change the settings on both the iPod and headunit in order to use iPod Video.



1. iPod TV OUT setting must be "ON"

2. AUX 1 should be switched to "iPod" in the initial menu. The initial menu is available even if the source is off.



























































- Direct connection for iPod and iPhone (audio & video)
  (CD-IU50V required)
  DivX\*/MP3/WMA/AAC playback on DVD and CD
  JPEG on CD-R/RW and USB
  Front USB direct connection: USB 2.0 (full speed)
  Bult-in MPEG-1/-2 decoder
  Built-in MPEG-1/-2 decoder
  Built-in decoder (Dolby Digital, Linear PCM)
  96 kHz/24-bit DAC (for audio)

- 10-bit video DAC
   Advanced Sound Retriever
   EEQ
   —5-mode preset equalizer
   —1-mode custom preset equalizer
  —3-band equalizer (Bass/Mid/Treble)
  —2-mode selectable loudness
   Rotary volume

   IP-Bus input

LISTS

- •2 RCA pre-outs (front + rear)
  •A/V inputs and outputs
  —1 RCA Video input
  —1 RCA Video output
  •Multi-channel processor (DEQ-P7650)
  control (CD-DD25 required)
  •External unit control via IP-Bus (2 units)
  •AUX-in by mini jack (front for audio & video)



**DVH-3150UB** 4-Channel High-Power DVD/VCD/CD Receiver with USB Direct Connection







































- DivX®/MP3/WMA/AAC playback on DVD and CD
- JPEG on CD-R/RW and USB
- Front USB direct connection: USB 2.0 (full speed)
- Built-in MPEG-1/-2 decoder
- Built-in decoder (Dolby Digital, Linear PCM)
- •96 kHz/24-bit DAC (for audio)
- 10-bit video DAC

- Advanced Sound Retriever
- •EEQ
- -5-mode preset equalizer
- -1-mode custom preset equalizer
  -3-band equalizer (Bass/Mid/Treble)
  -2-mode selectable loudness

- · Rotary volume
- 1 RCA pre-out (rear)
- · A/V input and output
- -1 RCA Audio input
- -1 RCA Video output
- AUX-in by mini jack (front for audio)

#### ■ USB Direct Connection\* for iPod and iPhone



(ALL AV HEADUNITS\*\*) \*\*Except AVH-P7950DVD, AVH-P6050DVD and DVH-3150UB AVH-P5150DVD: Does not apply to iPhone.

Pioneer's new DVH-P4150UB is ready to roll with capability for direct connection to your iPod and iPhone. File search and access are extra-quick. The headunit keeps song, artist, time and album information displays very clear and user-friendly. A car entertainment system's wired connection for direct digital signal transfer from iPod into USB terminal maintains clean sound.



Made for

iPhone

\*Please see page 30 for details about iPod compatibility with Pioneer headunits

#### Front USB Direct Connection for iPod with DVH-P4150UB





#### DivX®/MP3/WMA/AAC Playback on DVD



ALL AV HEADUNITS\* \*Except AVH-P6050DVD

Pioneer AV headunits can play compressed data formats (DivX® movies; MP3, WMA and AAC audio) burned from a PC onto CDs and DVDs. Simply load a disc into your car entertainment system and enjoy. Capacity of a recordable DVD is so huge that your entire music collection is likely to fit on one or two discs full of MP3, WMA and AAC files. with no need for external devices or connections

# ■ AUX-In Connection by Mini Jack



ALL AV HEADUNITS\*

Pioneer's single-DVD players each have a built-in AUX input for connecting a portable media player and other external auxiliary devices.

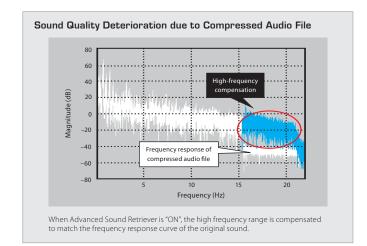
\*Front AUX-in: AVH-P3150DVD/DVH-P4150UB/DVH-3150UB Audio only: AVH-P7950DVD/AVH-P6050DVD/DVH-3150UB



#### ■ Advanced Sound Retriever



Hear the glory of original sound across a deeper, wider spectrum from highly compressed MP3, WMA and AAC files stored on USB device, iPod and portable media players. By compensating for data (especially higher frequencies) that tend to get lost in the digital compression process, Pioneer's Advanced Sound Retriever technology enhances audio reproduction nearly all the way up to 20 kHz frequencies. We can make your music sound close to CD quality.



## Multi-Channel Processor

#### DEQ-P7650 Multi-Channel Processor DOLBY. dts Hi-VOLT DSP <u>MOSFET 50W×5</u> Microphone for Auto EQ • Built-in decoder (DTS, Dolby Digital, Dolby Pro –2-mode custom preset equalizer -Optimum down-mix for normal speake Logic II, Linear PCM) -Multi-channel Auto EQ -2 RCA Audio inputs layout —Digital SFC (Sound Field Control): 6-mode (Musical/Drama/Action/Jazz/Hall/Club) —Dual optical inputs (DTS, Dolby Digital, Dolby Pro Logic II, Linear PCM) •6-ch. DAC Built-in crossover network (L/R) •5-ch. built-in amplifier –Crossover frequency: 63 Hz/80 Hz/100 Hz/ • SFC for multi-channel source • Built-in 6-ch. DSP Digital listening position selectorOptimum sound for car environment 125 Hz/160 Hz/200 Hz · IP-Bus input/output -7-mode preset equalizer -Dynamic range control •6-ch. RCA pre-outs

#### **■** Dual Optical Inputs

#### DEQ-P7650

It is easy to expand DVD entertainment. The DEQ-P7650 has dual optical inputs for further upgrading your DVD system.

For example, by connecting one main DVD headunit (AVH-P5150DVD, DVH-P4150UB, etc.) plus additional source DVD player (XDV-P650) with

the DEQ-P7650, you can instantly enjoy multi-DVD entertainment with dynamic 5.1-channel surround sound.



Dual optical inputs

## ■ Built-In 6-Channel DSP (Digital Signal Processor)

## DSP

#### DFQ-P7650

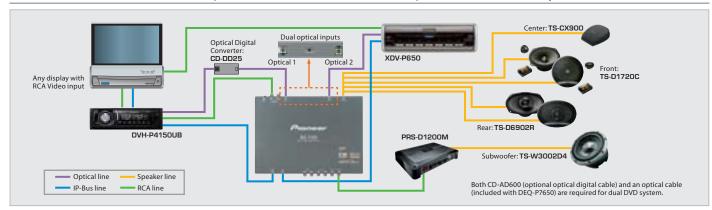
The driver who is looking for the versatility, sonic purity and distortion-free control of digital signal processing should be introduced to the DSP features of the DEQ-P7650. Built-in 6-channel DSP converts the incoming signals to digital form. The user can then balance the output signal to match the acoustic characteristics of a specific car and create a personal sound profile by using the Parametric Equalizer and SFC controls. A range of DSP-based sound timing features allows the DEQ-P7650 to be set up for truly optimum performance.

SFC (Sound Field Control) lets you optimize the aural ambience of every sound source. Musical, Drama and Action modes are heard to best advantage over 5.1-channel surround systems. For Jazz, Hall and Club modes, a two-channel stereo system is sufficient.

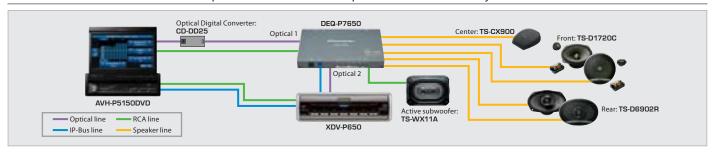
# CD-DD25

Optical Digital Converter for DEQ-P7650 Connection with AVH-P5150DVD, AVH-P4150DVD, AVH-P3150DVD and DVH-P4150UB

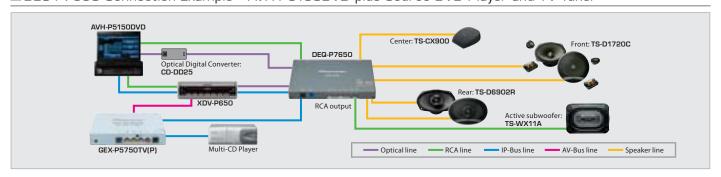
#### DEQ-P7650 Connection Example—DVH-P4150UB & Monitor plus Source DVD Player



#### DEQ-P7650 Connection Example—AVH-P5150DVD plus Source DVD Player



## DEQ-P7650 Connection Example—AVH-P5150DVD plus Source DVD Player and TV Tuner



### Other AV Units

# XDV-P650 6-Disc Multi-DVD/VCD/CD Player















PAIL / NTTSC

- •Built-in MPEG 2/1 decoder
- · Built-in decoder (Dolby Digital, Linear
- 96 kHz/24-bit DAC (for audio)
- 10-bit video DAC Controlled by IP-Bus headunit—full control by A/V entertainment master unit and external control by any IP-Bus headunit
- Stand-alone use with an equipped
- remote sensor
- Optical digital output (DTS, Dolby Digital, Dolby Pro Logic, Linear PCM)
  GUI control with joystick remote control and on-screen display

#### **HIDE-AWAY UNIT**

- Analog IP-Bus outputComposite Video output (front + rear)







The compact 1-DIN size allows the XDV-P650 to be easily installed into the dashboard. Thus, dashboards with 2-DIN space can combine it with a 1-DIN headunit.

#### XDV-P650 Connection Compatibility with Main Units

AVH-P7950DVD	Yes	AVH-P4150DVD	External
AVH-P6050DVD	External	AVH-P3150DVD	External
AVH-P5150DVD	Yes	DVH-P4150UB	External

The XDV-P650 can be used either as a stand-alone multi-DVD/Video CD/ CD player by connecting it directly to a monitor with a video input, or as a source unit by connecting to a headunit with an IP-Bus connection.



Playback of the discs is quick and easy by pushing buttons 1 to 6.

# SE-IRM290

#### IR Wireless Headphone

•For use with the AVD-W7900



# AVD-W7900 Limited distribution

PAL/NTSC

#### 7" (16:9) Widescreen Rear Seat Video Display

- 7" (16:9) wide TFT active matrix LCD color screen Picture control (brightness/contrast/hue/color)
   wide screen modes (Just/Full/
- Cinema/Zoom/Normal)
  •IR transmitter for optional wireless headphone (SE-IRM290)
- Power supply in2 Audio/Video inputs
- (composite Audio & Video)
   1 Audio/Video output
- (composite Audio & Video)



# **AXM-P7650**

#### Multi-Channel Processor Controller



- display
   Use for control of DEQ-P7650
- Multi-Channel Processor Full control multi-channel
- function with OEL display
   Speaker input for OEM radio
- or non-RCA output headunit
- IP-Bus connection to IP source unit • Joystick remote control







OEL IP-BUS

Limited distribution

# ND-BC2 Universal Rear View Camera

- · Wider Viewing Angle: 135 Degrees (Horizontal) and 100 Degrees (Vertical)
- Newly Developed 6.3 mm Color CCD with 270,000 Pixel Resolution (492 × 512 Pixels) for Higher Visibility even at night • More Compact Camera Unit: 27 mm (W)  $\times 27 \text{ mm}$  (H)  $\times 26 \text{ mm}$  (D)

NOTES: The rear view camera is NOT intended for entertainment purposes. It is specifically designed to allow the driver to observe a towed boat o vehicle during transport.

The optional rear view camera must be a "reversed image" type.





# ND-BC20PA Visual DSP Unit with ND-BC2

• Adjustable (Normal/High) viewing angle for easy assessment of parking space width and depth  $\, \cdot \,$  Lens correction for undistorted rear view image  $\, \cdot \,$  Camera position compensation rotates the image for optimal rear view without changing camera position, even if the camera is not installed in the middle of the rear and aimed horizontally



ND-BC20PA Connection for Switching Viewing Angle







# ND-BC20PA Connection Example Visual DSP Hide-Away Unit 84 mm (W) × 20 mm (H) × 65 mm (D) ND-BC20PA Rear View Camera View Mode Switch and Camera Position Adjuster

# **GEX-P5750TVP**

## GEX-P5750TV

## Hide-Away TV Tuner for PAL/SECAM\*

- 24-station (12 TV1/12 TV2) presets by BSSM
- P-Bus input and output terminals
   RCA composite video output\*\* for front and rear display (GEX-P5750TVP: PAL/SECAM, GEX-P5750TV: NTSC/PAL-M)
- RCA audio output for rear display
- AV-Bus input/output
- On-screen display Remote control sensor
- · Mode change: source or stand alone
- Hide-Away TV Tuner for NTSC/PAL-M
  - \*\* The video output does not feature conversior function for rear display(s) between PAL and





GEX-P5750TVP

# IN-CAR SURROUND SOUND FOR MAXIMUM IMPACT

### **Peerless DVD Playback**

AVH-P3150DVD DVH-P4150UB

The AVH-P7950DVD player packs versatile technology including 50 W x 8-channel MOSFET amplifier and decoders for DTS, DTS-ES, DTS Neo:6, DTS 96/24, Dolby Digital, Dolby Pro Logic II, Dolby Digital EX and Linear PCM for enhanced multi-channel surround and all-around versatility. Auto time alignment and multi-channel Auto EQ effortlessly customize

DVH-3150UB

Simple touch panels make this and other Pioneer AV headunits a breeze to operate. The AVH-P7950DVD\*, DVH-P4150UB and DVH-3150UB can even play multiple formats: MP3, WMA, AAC and DivX° files from DVDs.

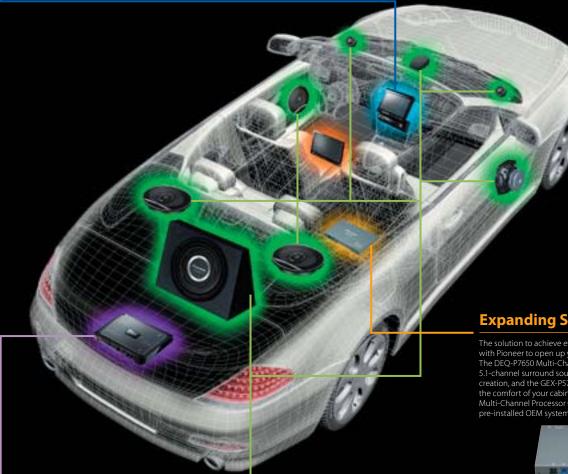
XDV-P650

\*AVH-P7950DVD has built-in multi-channel processor.



#### AVH-P7950DVD

" (16:9) Wide WVGA Fully Motorized LCD Color Display with 8-Chan High-Power DVD/VCD



### **Expanding Sound By The Unit**

The solution to achieve every sound has never been simpler, The DEQ-P7650 Multi-Channel Processor lets you enjoy 5.1-channel surround sound from a dual DVD system of your the comfort of your cabin. You can even use the AXM-P7650 Multi-Channel Processor Controller to upgrade your car's pre-installed OEM system to 5.1-channel surround.



DEQ-P7650 Multi-Channel P

DEG-P7650 GEX-P5750TV(P) CD-VS33

## **Digital Amps of Compact Power**

Pioneer's Class-FD ICEpower and Class-D power amplifiers redefine state-of-the-art power amplification, thanks to their high-efficiency input power processing, compact design, and dynamic, yet stable clarity of subwoofer and speaker output



PRS-D4200F Class-FD 4-/2-Channel Bridgeable Amplifier

PRS-D2000SPL Class-D Mono Amplifier

PRS-D4200F PRS-D2000SPL PRS-D1200SPL GM-D8400M GM-D7400M

PRS-D2200T PRS-D1200M

# **Dynamic Linear Surround**

To see how well high-performance speakers can suit even compact spaces, consider Pioneer shallow-type subwoofers that are shallow enough in depth to install behind or under seats, yet deliver deep, dynamic bass. Smartly designed for easy 6.1- and 5.1-channel surround, the lineup of Pioneer's flush mount speakers features extra-rigid lightweight cones that deliver crisp, clear low-frequency sound across a wide dynamic spectrum from low whispers to massive volumes.

TS-D6902R	TS-D1602R	TS-W12PRS			
TS-M171PRS	TS-S101PRS	TS-TO31PRS			
TS-C171PRS	TS-C131PRS	TS-D1720C			
TS-D1320C	TS-A1702C	TS-A1302C			
TS-W3002D2	TS-W3002D4	TS-W308D2			
TS-W308D4	TS-SW3001S4	TS-SW3001S2			
TS-SW2501S4	TS-SW2501S2	TS-WX11A			
TS-WX22A	TS-CX900				



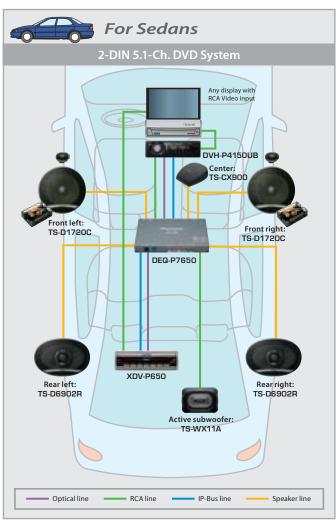
TS-SW3001S4

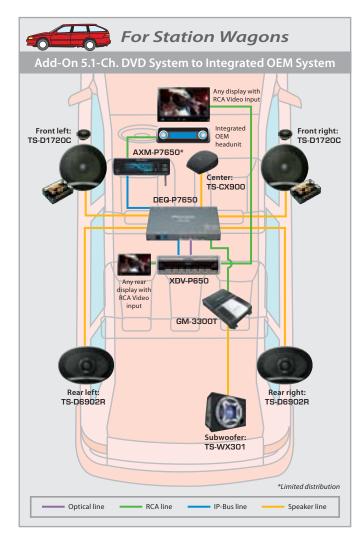


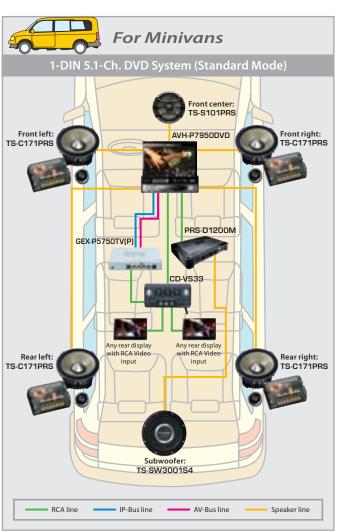
TS-D6902R

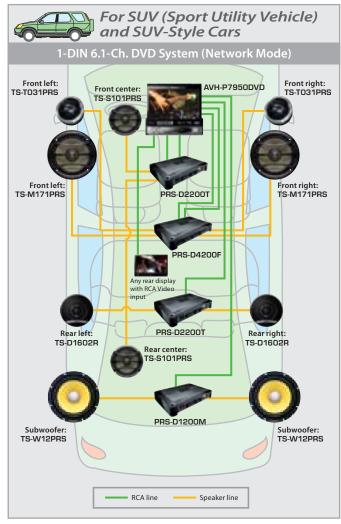


TS-WX301 Bass-Reflex Subwoofer









# UNIFY YOUR UNIVERSE OF SOUND

Gain capability to extend your listening pleasure from more sources, for longer lengths of time. Now, a Pioneer audio headunit can play high-capacity, extra-compact SD memory cards as well as iPod, iPhone and portable media players. Every connection is simple, so you can bring more music onboard without complications.





**DEH-6150BT** Built-in Bluetooth® for Safer Calling



Easy Front USB Connection and OEL Display





# **EXPANDED CONNECTION**

#### ■ Multiple Media Connectivity

Getting maximum play out of your in-car system requires a more seamless connection to various media. So the DEH-4150SD lets you bring SD memory cards containing music onboard for headunit storage and playback. You can also directly connect, control and playback music from an iPod, iPhone, USB device or other external portable media player.

























# RAISING DIGITAL AUDIO QUALITY

## ■ Advanced Sound Retriever

 DEH-P7150UB
 DEH-6150BT
 DEH-P5150UB
 DEH-4150SD
 DEH-3150UB

Pioneer audio headunits process high-quality sound even from compressed audio files stored in an iPod, USB device, etc.

ADVANCED SOUND RETRIEVER



# MAKING CONVENIENCE MORE COMFORTABLE

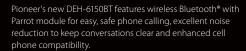
### ■ Wired Remote Control Input

 DEH-P7150UB
 DEH-6150BT
 DEH-P5150UB
 DEH-4150SD
 DEH-3150UB

DEH-2150UBG

For more convenient entertainment system control that won't compromise driving safety, this feature lets a driver operate a Pioneer headunit without taking hands off of the steering wheel (given that the vehicle has factory-equipped remote control installed on the steering wheel).

#### ▶ Bluetooth® Wireless Technology







**DEH-6150BT** 4-Channel High-Power WMA/MP3/AAC/CD Receiver with USB Direct Connection and Bluetooth® Wireless Technology









































# Introducing a Better Hands-Free Solution

#### Simple and Convenient

Enjoy the convenience of having Bluetooth® built right into the unit, with no additional hands free car kits or other accessories needed. The unit acts like a speakerphone, channeling the sound through your car speakers which makes the call sound better. It also automatically mutes your music so that you'll never miss a call.



Notes: Use of Bluetooth® is permissible according to regulations on radio waves in the country in which the Bluetooth® product is used. Ask your nearest dealer about Bluetooth® connectivity with your cell phone.

#### ■ Built-in Bluetooth® Technology with Parrot Module

With Bluetooth® module by Parrot, cell phone compatibility is extended, and calls come in loud and clear.

#### **Expanded Cell Phone Compatibility**

Thanks to Parrot technology, Pioneer units are now compatible with more

#### **Auto Phonebook Synchronization**

Connect your cell phone to the DEH-6150BT, and phonebook synchronization is automatic.











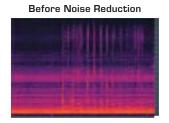
Parrot

move wireless

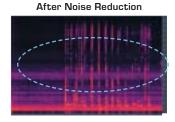
**Bluetooth**®

#### **Improved Noise Reduction**

The DEH-6150BT incorporates new noise reduction technology that can reduce the effect of road noise.







#### ■ More Phonebook Memory

Use with Phone Pairing to transfer your entire phonebook at a single time to the headunit, which can memorize up to 1,000 different numbers: e.g., 500 persons × 2 phone types (cell phone, home).







**1,000** numbers

### ■ SMS Alert

SMS alert lets you know if you receive any incoming text messages, even if you are listening to loud music. The message alert will play a sound and an icon will appear on the screen.

#### ■ Phonebook Access

Don't stop the music to make a call. You can access a phonebook without switching from the sound source to Bluetooth® mode.





#### "Wireless Audio" Control and Streaming

When you're not utilizing hands-free calling, the DEH-6150BT can use Bluetooth® Wireless Technology to feed your appetite for entertainment. Using "wireless audio" control and streaming (AVRCP, A2DP), you can control and listen to a compatible audio player or music phone on your headunit.









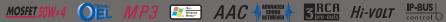






**DEH-P7150UB** 4-Channel High-Power WMA/MP3/AAC/CD Receiver with USB Direct Connection

**NEW** 









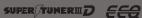






























#### **■** USB Direct Connection



 DEH-P7150UB
 DEH-6150BT
 DEH-P5150UB
 DEH-4150SD
 DEH-3150UB
 DEH-2150UBG
 FH-P6050UB

Take your favorite MP3, WMA and AAC files for a ride. With direct connection of a new Pioneer headunit\* to a portable media player, USB device or other USB-compatible gear, you can play in your car whatever you've recorded via PC. It's fast and easy. No adapters are required.

NOTE: Unauthorized copying of music is strictly prohibited. Not every device is compatible. See more details in Pioneer website. Compatible with USB device only. Not compatible with DRM (Digital Rights Management) contents and MTP (Media Transfer Protocol) connection players.

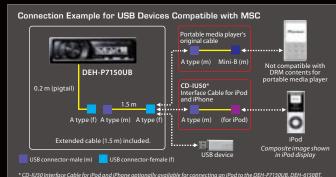
#### **CD-IU50**

Interface Cable for iPod and iPhone

Optionally available for connecting an iPod to the DEH-P7150UB, DEH-6150BT, DEH-P5150UB, DEH-4150SD and FH-P6050UB

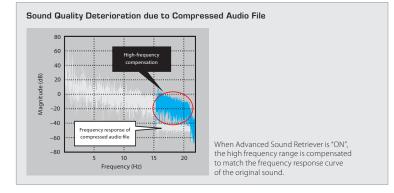






CD-U50 Interface Cable for iPod and iPhone optionally available for connecting DEH-P5150UB, DEH-41505D and FH-P6050UB. Please see page 30 for details about iPod compatibility with Pioneer headunits. A 3rd or 4th generation iPod requires CD-IB100II.

Hear the glory of original sound across a deeper, wider spectrum from highly compressed MP3, WMA and AAC files stored on USB device, iPod and portable media players. By compensating for data (especially higher frequencies) that tend to get lost in the digital compression process, Pioneer's Advanced Sound Retriever technology enhances audio reproduction nearly all the way up to 20 kHz frequencies. We can make your music sound close to CD quality.



**DEH-P5150UB** 4-Channel High-Power WMA/MP3/AAC/CD Receiver with USB Direct Connection



ADVANCED

RETRIEVER





































- •Full Dot OEL (Organic EL) display
- · Direct AUX-in by mini jack (front)
- Front USB direct connection: USB 2.0 (full speed)
   Direct connection for iPod and iPhone (CD-IU50 required)
- ·Bluetooth® adapter ready
- · Advanced Sound Retriever
- -7-band digital graphic equalizer
- Rotary Commander Direct Sub Drive
- · Wired remote control input

Spectrum analyzer

• Multi-language display (English/Spanish/Portuguese)

· 3 RCA pre-outs (front + rear + subwoofer)



#### ■ Full Dot OEL (Organic EL) Display



DEH-P7150UB\* DEH-P5150UB RS-D7RII\*

DEX-P90RS\* DEH-P80RSII\*

The Full Dot OEL display allows you to scroll through your iPod and USB device with greater ease, displaying up to three lines in list mode. The unit also comes with features like 3D animated screensavers and a wider viewing angle range which provides clear, trouble-free viewing from virtually any position, even in sunlight.

\*White color OEL display









3D Animated Screensave



White Color OEL Display

# ■ Rotary Commander and List Key

DEH-P7150UB DEH-P5150UB DEH-4150SD

Next to the Rotary Commander on the new DEH-P5150UB sits a large LIST key for extra-quick, easy file search and access. Press it to display folder or file lists, rotate

the commander dial to search, then press the commander button for playback.



DEH-P5150UB

## Link Play for iPod

 DEH-P7150UB\*
 DEH-6150BT
 DEH-P5150UB
 DEH-4150SD
 FH-P6050UB\*

Listening to an artist that you just can't get enough of and want to hear more? Now you can use Link Play to rediscover music buried in the thousands of songs in your library. You can also have your passenger control your music directly from the iPod.



# DEH-4150SD

4-Channel High-Power WMA/MP3/AAC/CD Receiver with USB Direct Connection and Built-in SD Memory Card Slot

































- Built-in SD memory card slot (SDHC compatible)
   Direct AUX-in by mini jack (front)
- Front USB direct connection: USB 2.0 (full speed)
- Direct connection for iPod and iPhone (CD-IU50 required)
- Advanced Sound Retriever
- -3-band parametric equalizer
- Rotary Commander Direct Sub Drive
- •2 RCA pre-outs: front + rear/subwoofer (selectable)
- ·Wired remote control input



iPhone

# ■ Built-in SD Memory Card Slot (SDHC Compatible)



The new DEH-4150SD has a built-in slot for SD memory card\* of up to 16 GB containing MP3, WMA, AAC and WAV music files. Such huge capacity allows for seamless playback with no need to change SD cards often. That goes a long way toward extending convenience and listening pleasure.

\*Please see page 27 for details about SD memory card compatibility with DEH-4150SD.





#### ▶ Front USB Direct Connection



It's fast and easy. No adapters are required.

DEH-6150BT | DEH-P5150UB | DEH-4150SD | DEH-3150UB | DEH-2150UBG

Take your favorite MP3, WMA and AAC files for a ride. New Pioneer headunits have a front USB terminal to directly connect\*\* a portable media player, USB device or other USB-compatible gear, so you can play in your car whatever you've recorded via PC.

\*\*Please use CD-U50E USB extension cable if a direct connection causes a USB device to protrude from the



#### ■ USB Direct Connection for iPod and iPhone

DEH-P7150UB\* | DEH-6150BT | DEH-P5150UB | DEH-4150SD | FH-P6050UB\*

Pioneer's new headunit is ready to roll with capability for direct connection\*\* to iPod nano, iPod or iPhone. File search and access are extra-quick. The headunit keeps song. artist, time and album information displays very clear and user-friendly.

\*Does not apply to iPhone. \*\*CD-IU50 required









#### **CD-U50E USB Extension Cable**

50 cm cable optionally available for connecting a headunit with built-in USB port to an external USB device.



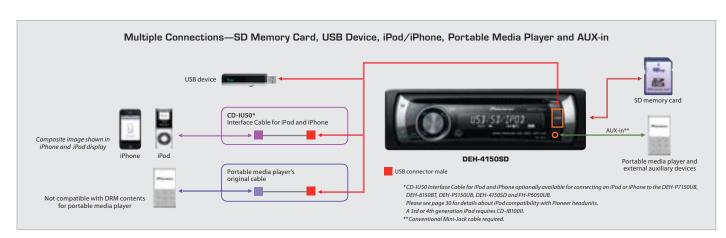




#### ■ Speedier Search Using iPod and iPhone

DEH-6150BT DEH-P5150UB DEH-4150SD

Now, Pioneer's latest headunits are even easier to enjoy along with an iPod than previous headunits. A new USB mechanism speeds up "List Search", refined processing speeds up "Alphabetical Search" and the Rotary Commander speeds up access to any file in the iPod.



#### DEH-4150SD: SD Memory Card Formats and Features for Playback

Applicable Logomarks	e Logomarks		•
	سَينَ	Miùi. Œ≅	•*
	Wicto	Micro Micro	•*
Max. Memory Capacity			16 GB
File System			FAT16/32

NOTES: "SD", "SDHC", "miniSD", "miniSDHC", "microSD" and "microSDHC" Logos are trademarks.

SDHC stands for SD High Capacity memory card.

\*Maximum capacity of applicable "miniSDHC" and "microSDHC" memory cards is 8 GB (as of September 2008).

Decoding Format	MP3	MPEG-1/-2 Audio Layer-3
	WMA	Version 7/7.1/8/9/10/11 (2-ch. audio)
	AAC	MPEG-4 AAC (iTunes encoded only) (version 7.7 and earlier versions)
	WAV	Linear PCM, MS ADPCM (non-compressed)
Text Data	File/Folder Name	• (64 bytes)
FF/REV & Pause		•
Scan/Repeat		• (File/Folder)
Random Play		• (Folder/All)



#### ▶ Front AUX-In Connection



Hook up your portable digital devices with ease in an instant. Each new Pioneer headunit has a built-in AUX input on its front panel for connecting a portable media player and external auxiliary devices.

#### ■ Wired Remote Control Input

DEH-P7150UB	DEH-6150BT	DEH-P5150UB	DEH-4150SD	DEH-3150UB
DEH-2150UBG				

Since entertainment shouldn't compromise driving safety, Pioneer engineered this feature for cars with factory-equipped remote control installed on the steering wheel to give drivers more convenient control of a Pioneer headunit without having to take their hands off the wheel.

#### ■ Built-in 50 W x 4-Channel High-Power MOSFET Amplifier

MOSFET 50W×4

ALL AUDIO HEADUNITS\* \*Except KEH-P2035, RS-D7RII and DEX-P90RS

To minimize voltage loss in its headunit amplifiers, Pioneer built-in high-performance Power MOSFET integrated circuitry that processes signals efficiently at 50 W  $\times$  4 maximum total output.

High-speed MOSFET switching reduces distortion to virtually nothing at high frequency ranges, thanks to superior characteristics of linearity that smooth the signal transmission path from input to output. Pioneer's independent routing of input and output current is essential to obliterating distortion.

High power of 50 W per channel and characteristics of the bonding wire ensure excellent sound quality. The 99.99 % pure OFC (oxygen-free copper) bonding wire has low electrical resistance, so minimal electric power is lost as heat in the IC chip, enhancing power handling efficiency as well as sound quality.



Power MOSFET high-power IC chip



#### Display Off Enhances Security and Ambience

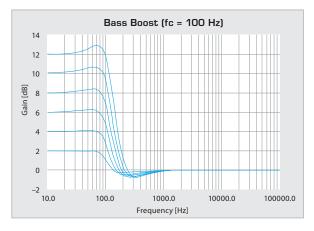
DEH-P7150UB	DEH-6150BT	DEH-P5150UB	DEH-4150SD	FH-P6050UB
RS-D7RII	DEX-P9ORS	DEH-P80RSII		

To avoid unwanted attention and indulge more completely in the listening experience, press and hold the DISP OFF button for two seconds, and all headunit illumination and display lights (except that for the DISP OFF button) turn off instantly, even while the headunit is in playback mode.

#### ■ Bass Boost

DEH-P7150UB         DEH-6150BT         DEH-P5150UB         DEH-4150SD         FH-P60	050UB							
Bass Boost offers a choice between 0 dB to 12 dB level settings that can be adju	sted							
in 2 dB steps, letting you set the optimal bass level for each speaker and subwoofer								
connected to a system, according to preference and music style. The result is more								
precise control over the balance of sounds to enhance the overall impact of the	music							

vou listen to.



**DEH-2150UBG** 4-Channel High-Power WMA/MP3/CD Receiver with USB Direct Connection



























- Direct AUX-in by mini jack (front) Front USB direct connection: USB 2.0 (full speed)
- Advanced Sound Retrieve
- Rotary volume 1 RCA pre-out (rear)
- · Wired remote control input

Distribution of the model is limited to certain areas.

# **DEH-1150MPG** 4-Channel High-Power WMA/MP3/CD Receiver



€<del>€</del>

















- Direct AUX-in by mini jack (front) BMX (Bitmetric Equalizer)
- Rotary volume 1 RCA pre-out (rear)

Distribution of the model is limited to certain areas.

## **▶** EEQ (Easy Equalizer)



ALL AUDIO HEADUNITS\* \*Except KEH-P2035, RS-D7RII and DEX-P90RS

Sound shaping is at your command. You can adjust the sound according to in-car acoustic characteristics and the music you listen to.

#### 5-Mode Preset Equalizer

You can switch among five preset equalization curves\* (Super Bass/Powerful/Natural/ Vocal/Flat) simply by pushing an EQ button. Each of these settings boosts bass and high-frequency ranges in ways that suit the music best.

\*Dynamic/Powerful/Natural/Vocal/Flat in the DEH-3150UB, DEH-2150UBG and DEH-1150MPG.

#### 2-Mode Custom Preset Equalizer

Create and memorize your favorite equalization curves from an amazing variety of sound-shaping dimensions and combinations, just as you like. Custom-1 mode can memorize adjusted preset curves using 7-band\* digital equalizer settings for each source (Source EQ memory). Custom-2 mode can register your favorite custom curve (based on Flat mode\*\* curve) for all sources using the 7-band\* digital equalizer.

- \*L/R independent 16-band for DEH-P80RSII.
- \*\*Flat mode also remains after customizing equalization curve.

#### 1-Mode Custom Preset Equalizer

Pioneer's headunits feature a 1-mode custom preset equalizer for creating your favorite sound curve from an amazing variety of sound-shaping dimensions/combinations exactly as you like. This mode can memorize adjusted preset curves by 3-band parametric equalizer\* settings for each source.

\*Bass/mid/treble equalizer for DEH-3150UB, DEH-2150UBG and DEH-1150MPG.

#### 2-Way Crossover (HPF/LPF)

Our most feature-loaded models allow extra EEQ flexibility with selectable HPF (High Pass Filter) and LPF (Low Pass Filter). Headunits of these systems can perform as amplifiers or separate crossover units for easier system control, particularly of low-frequency signals.

#### 3-Mode Selectable Loudness

Select among three levels (high/mid/low) to instantly boost volume when driving noise overpowers in-car sound.

#### 2-Mode Selectable Loudness

Select high or low volume boost level when extraneous noise drowns out your sound system.

	DEH-P7150UB	DEH-6150BT	50BT DEH-P5150UB DEH-4150SD		DEH-3150UB	DEH-2150UBG	DEH-1150MPG	FH-P6050UB	DEH-P80RSII
5-mode preset equalizer	•	•	•	•	•	•	•	•	•
Custom preset equalizer <2 = 2-mode, 1 = 1-mode>	2	1	2	1	1	1	1	2	2
Digital graphic equalizer <16 = 16-band, 7 = 7-band> <l independent="" r="L/R"></l>	7		7					7	16, L/R
2-way crossover: HPF/LPF <l independent="" r="L/R"></l>	•	•	•	•				•	L/R
3-band parametric equalizer		•		•					
Bass Boost	•	•	•	•				•	
Selectable loudness <3 = 3-mode, 2 = 2-mode>	3	3	3	3	2	2	2	3	3
Nuance control	•		•					•	•



FH-P6050UB 4-Channel High-Power WMA/MP3/AAC/CD Receiver with USB Direct Connection























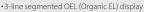












- Direct AUX-in by mini-jack (rear)
   USB direct connection: USB 2.0 (full speed)
- Direct connection for iPod (CD-IU50 required)
- ·Bluetooth® adapter ready
- · Advanced Sound Retriever
- •EEO
- -7-band digital graphic equalizer Rotary Commander
   Direct Sub Drive
- 2 RCA pre-outs: front + rear/subwoofer (selectable)





OFL



#### ■ 3-Line Segmented OEL Display

Pioneer's 2-DIN WMA/MP3 player FH-P6050UB features an extra-large, wide display with 3-line Segmented OEL of outstanding contrast and brightness. The 3-line character section offers a clear, uncluttered readout of artist, song title and operation menu data throughout a wide viewing angle range.



# **Multi-CD Players**

# CDX-P1280

CD-R/RW

IP-Bus 12-Disc Multi-CD Player

**CDX-P680** 





IP-Bus 6-Disc Multi-CD Player

- CD-R/RW playback with skip play ADPS (Automatic Disc Program Selection)



CDX-P1280



# **Cassette Player**

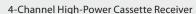
# **KEH-P2035**



• Disc title memory: 100 titles • ITS (Instant Track Selection)





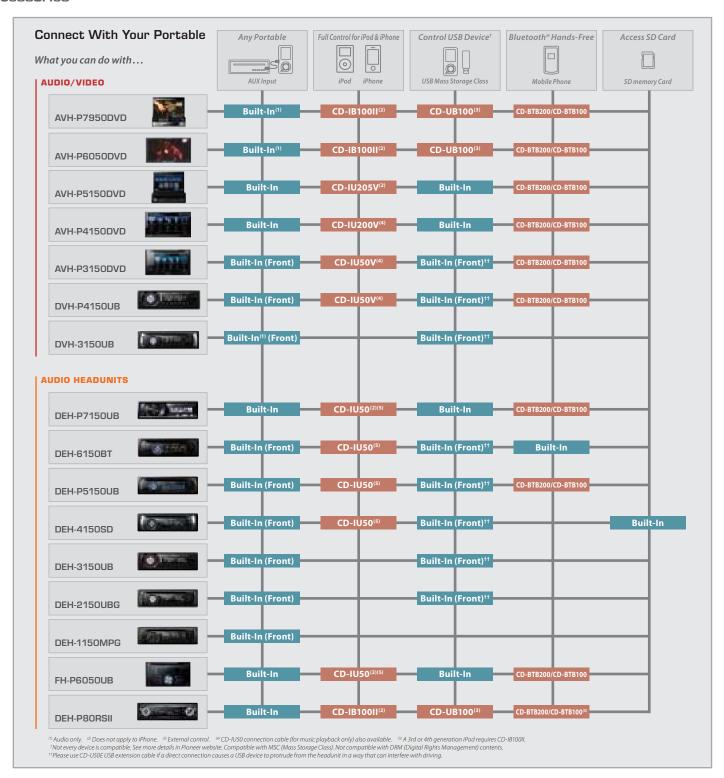


- · Adapter ready for iPod (external unit control)
- •BTB (Bass/Treble Booster)
  •2-mode selectable loudness
- 1 RCA pre-out (rear)

  - Radio intercept

    Multi-CD control (pause and repeat)





Connection for iPod Table with Pioneer Headunits  A: Plays audio A/V: Plays audio and video						0	0	<b>3</b>				0	0	<b>3</b>	0
Software Version Direct Connection for iPod			2.0	2.0	2.3.0	1.2.1	1.3.0	1.1.2	1.1.5	2.1.1	1.4.1	1.3.1	1.3.1	1.1.3	1.0.2
Model	Interface	Use with	iPh iPhone	one iPhone 3G	iPod 3rd gen.   4th gen.   5t		" " " " "				iPod mini	iPod nano 1st gen. 2nd gen. 3rd gen. 4th gen.			
AVH-P7950DVD/AVH-P6050DVD	IP-Bus	CD-IB100II	(1)(2)	(1)(2)	A	A	A	A	A	A <sup>(1)</sup>	Α	A	A	A	A <sup>(1)</sup>
	AUX	CD-RM10	Α	Α	_	_	A/V <sup>(3)</sup>	_	_	_	_	_	_	_	_
AVH-P5150DVD	Direct Connection	CD-IU205V	(2)	(1)(2)	Α	Α	A/V	A/V	A/V	A/V <sup>(1)</sup>	Α	Α	Α	A/V	A/V <sup>(1)</sup>
AVH-P4150DVD	USB Direct Connection for Video	CD-IU200V	A/V	A/V	_	_	A/V	A/V	A/V	A/V	_	Α	Α	A/V	A/V
	USB Direct Connection for Music	CD-IU50	Α	Α	_	_	Α	Α	Α	Α	_	Α	Α	Α	Α
AVH-P3150DVD	USB Direct Connection for Video	CD-IU50V	A/V	A/V	_	_	A/V	A/V	A/V	A/V	_	Α	Α	A/V	A/V
	USB Direct Connection for Music	CD-IU50	Α	Α	_	_	Α	Α	Α	Α	_	Α	Α	Α	Α
DVH-P4150UB	USB Direct Connection for Video	CD-IU50V	A/V	A/V	_	_	A/V	A/V	A/V	A/V	_	Α	Α	A/V	A/V
	USB Direct Connection for Music	CD-IU50	Α	Α	_	_	Α	Α	Α	Α	_	Α	Α	Α	Α
DVH-3150UB	AUX	3.5 mm AUX Cable	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
DEH-P80RSII	IP-Bus	CD-IB100II	(1)(2)	(1)(2)	Α	Α	Α	Α	Α	A <sup>(1)</sup>	Α	Α	Α	Α	A <sup>(1)</sup>
	AUX	3.5 mm AUX Cable	Α	Α	_	_	_	_	_	_	_	_	_	_	_
DEH-P7150UB	USB Direct Connection for Music	CD-IU50	_	_	_	_	Α	Α	Α	Α	_	Α	Α	Α	Α
	IP-Bus	CD-IB100II	(1)(2)	(1)(2)	Α	Α	_	_	_	_	Α	_	_	_	_
DEH-P5150UB/FH-P6050UB	USB Direct Connection for Music	CD-IU50	Α	Α	_	_	Α	Α	Α	Α	_	Α	Α	Α	Α
	IP-Bus	CD-IB100II	_	_	Α	Α	_	_	_	_	Α	_	_	_	_
DEH-6150BT/DEH-4150SD	USB Direct Connection for Music	CD-IU50	Α	Α	_	_	Α	Α	Α	Α	_	Α	Α	Α	Α
	AUX	3.5 mm AUX Cable	_	_	Α	Α	_	_	_	_	Α	_	_	_	_
DEH-3150UB/DEH-2150UBG/DEH-1150MPG	AUX	3.5 mm AUX Cable	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α

(1) Battery charge function not applicable. (2) A caution that "This accessory is not made to work with iPhone" appears on the display of an iPhone connected to the headunit. When an iPhone or iPhone 3G is connected to the headunit, car speakers may emit noise and interference may occur in transmission of signals sent from and received by the iPhone or iPhone 3G. (3) Although video may not be browsed via headunit, it may be displayed on the iPod itself. TV out needs to be On. Use iPod for the full video operation.

Notes: \*Since some functions may be limited by the headunit, please refer to operation manual for details.

\*Some functions may be limited, depending on iPod software version. This chart is based on information valid as of November, 2008. Please ask your nearest dealer for the latest information.

## **Accessories for Portable Devices**

# **CD-IU205V**



# **CD-IU200V**



# CD-IU50V



Interface Cable for AVH-P5150DVD with iPod



USB Interface Cable for AVH-P4150DVD with iPod/iPhone



USB Interface Cable for AVH-P3150DVD and DVH-P4150UB with iPod/iPhone











# **CD-IU50** Interface Cable for iPod and iPhone

Optionally available for connecting an iPod to the DEH-P7150UB, DEH-6150BT, DEH-P5150UB, DEH-4150SD and FH-P6050UB.



CD-U50E USB Extension Cable 50 cm cable optionally available for connecting

a headunit with built-in USB port to an external









USB device



#### A/V Accessories

**CD-RM10** 

AUX Input-Video

**CD-V150M** 

Mini-Jack Cable for iPod

AN-G3

Diversity TV Antenna with Built-In Booster

**CD-AB300** 

Optional AV-Bus Cable (3 m)

CD-AB50

Optional AV-Bus Cable (50 cm)

**CD-AD600** 

Optional Optical Digital Cable (6 m)

**CD-AD150** 

Optional Optical Digital Cable (1.5 m)

**CD-VS33** 

Audio/Video Selector

#### **Audio Accessories**

#### CD-HF1

Hands-Free Kit



**CD-IP150** 

Optional IP-Bus Extension Cable



**CD-SR100** 

Steering Remote Controller



**CD-RB10** RCA Bus Interconnector



Power Supply Wiring Kit

**RD-221** 



**RD-223** 

Optional Wiring Kit





Alternator Noise Suppressor

**RD-983** 





Alternator Noise Suppressor





In-Line RCA Noise Suppressor



## **RD-SR520**

High-Power Speaker Output to



# PURER PERFORMANCE FOR MAXIMUM PLEASURE

For the ultimate in-car sensation, Pioneer Reference Series (PRS) parts and components are engineered to meet the highest standards of performance and efficiency. Optical Digital Reference (ODR) and Pure Component Systems included in this series reproduce natural linear characteristics for sound as clear as a breath of fresh air.



Four Pioneer car audio products including the DEH-P80RSII and TS-D1720C won 2008 "Readers Choice" honors awarded by readers of Germany's renowned *autohifi* car audio magazine.





# **ODR (Optical Digital Reference) and RS Speaker Systems**

# RS-D7RII Component CD Receiver

Limited distribution









- High precision sound master clock circuitry
  Hi-quality CD drive
  Hi-bit conversion
  Digital direct
  Frequency change: 96 kHz to 44.1 kHz
  Source DVD control
  Digital optical input/output
  IP-Bus input/output

- Auto-slide face
  Rotary volume (High quality feel is enhanced by using aluminum for the volume and cross key while adding spinning graved finish on it)

- OFC power/ground cable
  Dual illumination (white or red selectable)









# **RS-P90**

Universal Digital Pre-Amplifier

Limited distribution

#### DSP Hi-VOLT



- Advanced Segment 24-bit D/A Converter
  Digital listening position selector
  Time Alignment
  Parametric bass/treble control
  31-band L/R independent graphic equalizer
  (1/3 oct.) with level control (±12 dB/0.5 dB
  steps)
- 4-way independent L/R crossover network (high/mid/low/subwoofer) —Crossover frequency: 20 Hz to 20,000 Hz

- (1/3 oct.)

  —Crossover Inequency. 20 H2 to 20,000 ft (1/3 oct.)

  —Crossover slope: 0 dB to –72 dB

  —Crossover presets: 5

  Gold-plated 8-channel RCA output (high/mid/low/subwoofer)

  Gold-plated screw-type power/ground
- •The one-sided terminals and the square aluminum bonnet that rotates by every 90 degrees considered for installation •High-performance 32-bit floating binary point type DSP

### ▶ High-Precision Sound Master Clock Circuitry

The latest integrated circuits require superior clock signal quality to handle digital data accurately without distortion at ever-higher speeds. Dual independent Sound Master Clock Circuitry in the RS-D7RII generates clock waveforms to read and process digital signals with ultra-precision, and eliminate jitter noise in transmission. The result: extraordinarily clear, pure sound.



Clock circuit board

### ▶ High-Performance SHARC® Digital Signal Processors

For remarkably precise 32-bit sound processing, the circuitry of the RS-P90 is mounted with three high-performance Analog Devices SHARC® DSPs, for left-channel, right-channel and coefficient calculation.



High-performance SHARC® DSP × 3

# RS-A9

#### 600 W Max. Limited distribution

#### Digital Integrated Power Amplifier

- 300 W  $\times$  2 (4  $\Omega$ ) (max. power) •High-performance 32-bit floating binary point
- type DSP •Built-in DSP (Digital Signal Processor) (FIR) —31-band L/R independent digital graphic equalizer (±12 dB/0.5 dB steps)

- –Time alignment –Digital listening position selector –Parametric bass/treble controls
- -Digital compression -4-way L/R independent digital cross network (high/mid/low/subwoofer)

- 1 optical digital input
  3 optical digital outputs (mid/low/subwoofer)



SHARC® DSP chin

## RS-A7

600 W Max. Limited distribution

#### Digital Power Amplifier

#### Common Features

- Bridgeable 4/3/2-channel capability
  Current feedback amplifier
  Full balanced system (bridgeable

- ground terminals
  •Low load impedance capability  $(4 \, \Omega, 2 \, \Omega \, \text{to} \, 8 \, \Omega \, \text{allowable})$ •Copper-plated chassis
  •L/R independent power supply
  •Sound master clock

# TS-TO1RSII

#### 3.5 cm Component Tweeter

- 3.5 cm tweeter with ion-plated DLC (Diamond-like Carbon)-coated dual arc ring diaphragm High-performance magnetic circuit features lightweight aluminum voice coil with neodymium magnet Zinc die-cast frame



\*With speaker unit only 50 W\*/60 W\*\* Max. \*\*With back chamber

300 W Max.

TS-W01RSII

25 cm (10") Component Subwoofer

•25 cm cone woofer with multiple pulp fiber composite diaphragm and integrated center cap
 •Space-saving small-enclosure-type design (recommended enclosure:
 14 Ito 28 I/0.49 cu.ft, to 0.99 cu.ft,
 •Corrugated fiber surround with damped coating on front and back edges
 •Large-sized ø140 mm voice coil with multiple neodymium magnets
 •Shallow mounting aluminum die-cast basket



# TS-M01RSII

120 W Max.

#### 17 cm Component Mid-Bass Speaker



# UD-NO1RSII



#### 2-Way Passive Crossover Network



#### Large ø140 mm Voice Coil

#### TS-W01RSII

The TS-W01RSII's magnetic circuit structure uses a voice coil with large ø140 mm diameter to drive the center part of the entire speaker cone to improve transient.

Multiple neodymium magnets creating powerful magnetic flux help drive the cone with exceptional strength and accuracy.

The large vent in the center of the speaker back is maximized for fine control to reduce air resistance. The result: more accurate bass reproduction.



Shallow mounting aluminum die-cast basket and large

## ▶ High-Quality Mid-Bass Speaker

die-cast basket

•Gold-plated large screw-type terminals

•Maximum input: 300 W

•Nominal input: 150 W

#### TS-MO1RSII

lon-plated DLC (Diamond-like Carbon)-coated titanium center cap is superior in rigidity, and concave to suppress resonance in the magnetic circuit.

High-Transient Short Voice magnetic circuit achieves excellent sound linearity from high to mid-range and features a high number of turns of wire in the short lightweight voice coil (for voice coil drivability that is 15 % better than its predecessor).

Corrugated surround with damped coating on front and back edge effectively absorbs unwanted vibration, achieves excellent linearity and reduces interference of cone and surround.



Corrugated surround

# Compact Enclosure

We design our subwoofer cones for compact (14 to 28 liters) speaker enclosures.

#### ■ Dual Arc Ring Tweeter Diaphragm

TS-TO1RSII

The TS-T01RSII's Dual Arc Ring Diaphragm, based on Pioneer's Super Wide Range Tune innovation, reliably reproduces clear sound audible up to super-high 48 kHz frequency.

The inside and outside of the center drive-type ring diaphragm are shaped differently from each other, and vibrate to varying degrees for various frequencies. These frequencies are mixed to achieve smooth characteristics for superior sound reproduction. The light diaphragm has a surface that is ion-plated with DLC (Diamond-like Carbon) coating for extra rigidity and minimal distortion. 35 mm in diameter, the diaphragm also contributes to excellent low frequency reproduction and precise, accurate sound staging.





# **HQ Active Component Systems**

# DEX-P90RS Component CD Receiver SUPER TUNER III DETAGHABLE PACE SECURITY. RCA Hi-VOLT Source DVD control Multi 24-bit D/A Converters with voersampling digital filter Rotary volume Consumit respect D Rotary volume Auto-slide face 3 gold-plated RCA pre-outs (front + rear + non-fading) Optical input/output External unit control via IP-Bus (2 units) AUX-In (with optional CD-RB20) High-quality hairline aluminum front panel Display off mode -03'23'





With a AXM-P90RS, a car's factory-equipped audio system can be upgraded for superior sound from various external devices. Use it with a DEQ-P90 for control and balance that Pioneer's advanced digital signal processing (DSP) provides.









RS-D7RII DEX-P9ORS





## ■ The Ultimate in Audio Tech

#### For Component Single-CD Player **Hi-Bit Conversion**

The RS-D7RII and DEX-P90RS upgrade the original CD audio signals from 16-bit to 24-bit, and increase CD data resolution by a factor of 256. The result: lower quantization noise, expanded dynamic range, minimal processing error, and superior linearity, delivering sound as it was meant to be reproduced and heard.

# For Digital Signal Processor



RS-P90 RS-A9 Time Alignment DEQ-P90

Signal output of each speaker can be calibrated in 1/20,000second\* increments, for optimal phasing of sound from the system, according to listener position. Precise equalization and suppression of frequency response disturbance makes for a clearer, more focused soundstage.

\*RS-A9: 1/40.000-second

— Digital delay processing makes all speakers sound as if they are virtually equidistant from the listener, for a clearer, front-focused soundstage.

# PRS-A900 4/3/2-Channel Bridgeable Power Amplifier

400 W Max.

Total Vibration RCA
Control



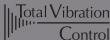
- $\begin{tabular}{ll} \bullet .50 \ W \times 4 \ (4 \ \Omega)/100 \ W \times 2 \ (4 \ \Omega)/50 \ W \times 2 \ + \\ 100 \ W \times 1 \ (4 \ \Omega)/50 \ W \times 4 \ (2 \ \Omega) \ (continuous power) \\ \bullet .100 \ W \times 4 \ (4 \ \Omega)/100 \ W \times 2 \ + 200 \ W \times 1 \ (4 \ \Omega)/200 \ W \times 2 \ (4 \ \Omega) \ (max. power) \\ \bullet .200 \ W \times 2 \ (4 \ \Omega) \ (max. power) \\ \bullet .871 \ depart \ depa$

- Low load impedance capability
  (4 Ω, 2 Ω to 8 Ω allowable)
  Gold-plated RCA input terminals
  Gold-plated large block-type speaker terminals

- High-performance balanced isolator circuit
   Multi Emitter Bipolar Transistor
   TVC (Total Vibration Control) technology



#### TVC (Total Vibration Control) Technology



-Stabilizes the amplifier and it's internal componentry by absorbing outer vibration with superior speed.



# Total Vibration

### PRS-D2000SPL

#### Class-D Mono Amplifier





LPF RCA Bass Boost

4,000 W Max.

## PRS-D1200SPL

### Class-D Mono Amplifier







- Common Features •Variable LPF (40 Hz to 240 Hz, -24 dB/oct.) •Input level control (400 mV to 6.5 V) •Low load impedance capability (1 $\Omega$  to 8  $\Omega$ ) •Gold-plated RCA input and output terminals
- 4-gauge, large block-type gold-plated speaker terminals
   Variable Bass Boost Remote (40 Hz to 120 Hz, 0 dB to +12 dB)
   Subsonic filter (20 Hz, -24 dB/oct.)

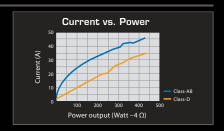
#### ■ Class-D Amplifiers

#### 

Class-D amplifiers overcome the inefficiencies of traditional Class-A or AB amplifiers. Pioneer's Class-D amps transform very little power into heat while a very high percentage of the power supply (67 %) is transformed into the load. This results in a very compact amp which needs little input power to produce very high output power.

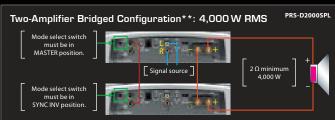
The Class-D amplifier's PWM (Pulse Width Modulator) modulates the original audio input signal with another

signal which has a much higher fixed frequency. The result is a digital signal which contains the input signal and a band of frequency components around the modulation frequency. A LPF (Low Pass Filter) will then filter out the high frequency pulses and the resulting amplified output signal is then sent to the subwoofer and/or speakers.



#### ► MASS (Multiple Amplifier Synchronization System) Connection Examples



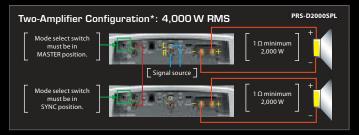


- Wiring for speaker must be 10 AWG minimum.
- Load may be any combination of speakers but impedance must be 1  $\Omega$  or larger. Load may be any combination of speakers but impedance must be 2  $\Omega$  or larger

PRS-D2000SPL PRS-D1200SPL PRS-D1200M

With the PRS-D2000SPL, PRS-D1200SPL and PRS-D1200M's SYNC connection, adjustment of the master amplifier also adjusts all other amplifiers in the cascade. This makes control

 $\hbox{*These are only a few examples of connection configurations for the PRS-D2000SPL. Ask your nearest carnels are also contained by the property of the prope$ stereo installer or dealer about power/ground wiring and installation details for the PRS-D2000SPL, PRS-D1200SPL and PRS-D1200M.



- \*1  $\Omega$  minimum speaker impedance for this configuration or damage will occur. \*\*2  $\Omega$  minimum speaker impedance for this configuration or damage will occur.

Caution: Having more than four amps in a sync configuration is not recommended. Sine waves can put excessive stress on an audio system, so if a sine wave source is used at high output level, damage can occur.

### Reference Sound Systems

# DEH-P80RSII Component CD Player/Receiver





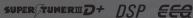


























High-quality Burr Brown D/A converter





- White full dot OEL (Organic EL) display
   Adapter ready for iPod
   USB adapter ready (external unit control)
   Bluetooth® adapter ready (external unit control)
   Burr Brown advanced segment-type 24-bit D/A Converter
   Built-in DSP
   EEQ

- Auto EQ

   Auto EQ for 3-way network

   Auto time alignment

   BBE\* digital sound processing

   Digital listening position selector

   BMX (Bitmetric Equalizer)

   L/R independent 16-band digital graphic equalizer

   L/R independent 2-way crossover: HPF/LPF

- —L/R independent 3-way crossover: high/mid/low
  —3-way digital network
  •Auto-slide face
  •Rotary Commander
  •3 gold-plated RCA pre-outs (front + rear + subwoofer)
  •Level indicator (L/R independent)
  •Spectrum analyzer
  •Multi-language display (English/Spanish/Portuguese)

# PRS-D4200F Class-FD 4/3/2-Channel Bridgeable Amplifier

1,200 W Max.







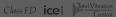




PRS-D2200T

Class-FD 2/1-Channel Bridgeable Amplifier

1,200 W Max.











•300 W × 2 (4  $\Omega$ )/1,200 W × 1 (4  $\Omega$ ) (max. power)

- Bridgeable 2/1-channel capability Bass Boost Remote (50 Hz, 0 dB/+6 dB/+9 dB/+12 dB)







Gold-plated large block-type

Gold-plated RCA input/output terminals

#### **Common Features**

- •Variable LPF/HPF (40 Hz to 500 Hz, -12 dB/oct.) •Input level control (400 mV to 6.5 V) Low load impedance capability (4  $\Omega$ , 2  $\Omega$  to 8  $\Omega$  allowable) •Gold-plated RCA input and output terminals
- Gold-plated large block-type speaker terminals
   Gold-plated large block-type power/ground terminals
   All terminals placed on one side
   Removable terminal/settings cover
   Speaker level input (1.6 V to 26 V)

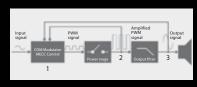
- Speaker line input turn-on sensor
   High-performance balanced isolator input circuit
   High-efficiency MOSFET output section
   TVC (Total Vibration Control) technology

### **▶** Class-FD ICEpower Amplifiers

Class FD ice

PRS-D4200F PRS-D2200T

Pioneer brings together its cutting-edge Class-D circuitry and ICEpower digital amplifier technology to create Class-FD (Full Range Class-D) ICEpower amplifiers that deliver superior performance and sound quality in car entertainment. Combining the unsurpassed efficiency of Class-D amps with the ultra-clean sound of Class-AB  $\,$ amplifiers, COM (Controlled Oscillation Modulation) technology not only eliminates unnecessary sensitivity to imperfect power supplies [1]—it compares the amplified PWM (Pulse Width Modulation) signal with the original input signal [2], compensating for any variance and lowering distortion in the process. MECC (Multivariable Enhanced  ${\it Cascade Control)}\ compensating\ for\ load-dependent\ frequency\ response, improving$ this response as this system receives analog signals from the output filter [3]. The result is truer fidelity featuring tight bass with minimal lag effect; crisp, airy mids and highs; and unsurpassed specifications contributing to qualities that outperform those of other premium-quality amplifiers.





## **PRS-D1200M**

Class-D Mono Amplifier

1,200 W Max.









Bass Boost



- Solum X | (4 1)/1,250 W X F (2 13)
  (max. power)
   Single-ended output circuit
   Variable LPF (40 Hz to 240 Hz, -18 dB/oct.)
   Input level control (400 mV to 6.5 V)
   Low load impedance capability (1  $\Omega$  to 8  $\Omega$ )

- Gold-plated RCA input and output terminals
   Gold-plated large block-type speaker
- terminals
   Gold-plated large block-type power/ground
- All terminals placed on one side
   Removable terminal/settings cover
   Speaker level input (1.6 V to 26 V)
   Speaker line input turn-on sensor

- Bass Boost Remote
  (50 Hz, 0 dB/+6 dB/+9 dB/+12 dB)
  Subsonic filter (20 Hz, -18 dB/oct.)
  SYNC control
  High-performance balanced isolator input
- High-efficiency MOSFET output section
   MASS (Multiple Amplifier Synchronization)

# GET CLOSER TO NATURE-NEW OPEN & SMOOTH SOUND

With their extra-wide directivity, low tweeter crossover frequency and distortion, plus light, rigid IMPP cones, Pioneer's PRS speakers realize a level of in-car audio quality that deserves its own name: "Open & Smooth" sound—a wide-open sound staging, rich, natural midrange and tweeter output with outstanding



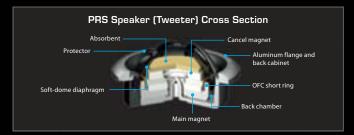


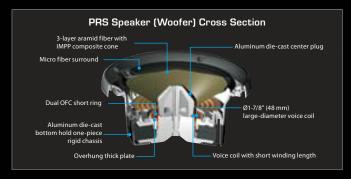


#### **▶** PRS Speakers

TS-C171PRS TS-C131PRS TS-M171PRS TS-S101PRS TS-T031PRS

Pioneer advances the proud heritage of its IASCA (International Auto Sound Challenge Association) award-winning Premier Reference Series. These speakers' superior response, linearity and sound directivity improve low- and mid-frequency reproduction, while making highs and lows sound smoother and more open





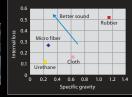
#### Micro Fiber Surround: Maximum Musical Response

The strong, high-density micro fiber material surrounding the woofer of a PRS speaker is very light and low in resistance and internal loss characteristics. This enhances linearity of the short winding length of the voice coil, thereby optimizing efficiency. Moreover, micro fiber doesn't stretch so it does a better job than other materials to

control vibration and enables higher power input. The result is faster response and more accurate

bass reproduction that allows all music to be heard to greatest advantage.

Polyester fiber \_\_\_\_\_ (polyurethane resin)

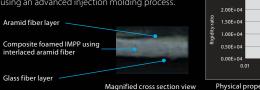


Magnified cross section view

#### 2nd-Generation Multilayer Cone: First-Class Sound Reproduction

For the PRS speakers, Pioneer also developed a multilayer woofer cone in an even better formulation, sandwiching composite foamed IMPP using interlaced aramid fiber between a woven carbon-blended aramid fiber layer and a glass fiber layer. This rigid cone structure provides impeccable midrange frequency reproduction and overall sound quality. The cone material is also supremely light and uniform in its physical properties because it is made without adhesives

using an advanced injection molding process.



Physical properties of cone materials

# PUNCH UP THE POWER, DIVE IN DEEP

It's sensational how such compact components can create such massive impact. Pioneer's Class-D digital amplifiers keep every sound pristine, and perfectly match subs that inherit Pioneer's championship-winning SPL technology to generate punchy, nicely damped bass with the help of light, rigid Basalt/Carbon fiber reinforced IMPP cones.







Regional 2007 1st Place dB Drag Extreme 5+ Class (178.9 dB) National

National
2007 1st Place dB Drag Extreme 5+ Class (179.5 dB)
World

World 2007 1st Place dB Drag Extreme 5+ Class (178.9 dB

World Reco

1st Place Super Modified 4001 - 8000 (177.7 dB 1st Place Super Modified 8001 - UP (181.1 dB) 1st Place Port Wars (181.2 dB) 1st Place Bass Olympics (174.9 dB)

4 | elain!=

2007 1st Place iDBL Ultimate 1 Class (176.2 dB) 2007 1st Place iDBL Ultimate 3 Class (178.2 dB)

DE Offiniale 3 Glass (170.2 db)

TS-W5102SPL





#### 4/3/2-Channel Bridgeable Power Amplifier

- LPF HPF RCA SPEAKER IN PUT

(max. power)
• Bridgeable 4/3/2-channel capability

### **GM-5400T**

760 W Max.



### 2/1-Channel Bridgeable Power Amplifier







- (continuous power) 250 W  $\times$  2 (4  $\Omega$ )/760 W  $\times$  1 (4  $\Omega$ ) (max. power) Bridgeable 2/1-channel capability

- •RCA input terminals
  •Bass Boost (50 Hz, 0 dB/+6 dB/+12 dB)

#### **Common Features**

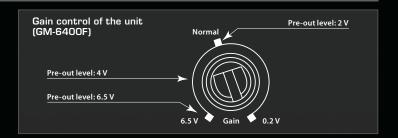
- •Input level control (200 mV to 6.5 V) •Input level/gain control

- Large screw-type power/ground terminals Speaker level input (1.6 V to 26 V)
- PWM regulated power supply with MOSFET switching

#### ■ Gain Control

ALL POWER AMPLIFIERS\* \*Except RS-A9 and RS-A7

The Pioneer GM analog amplifiers are all equipped with the Gain Control, a protective function that prevents malfunction of the unit itself, as well as the speakers, caused by too much output, improper use and improper connection. Even when the amplifiers are connected to the headunits with high-voltage pre-outs, the signal is not clipped or distorted if the gain control is set to proper position, so high S/N (Signal-to-Noise) ratio is realized in the speaker level signal. To ensure continuous audio output, the amplifier's gain control must be set according to the pre-out maximum output level of the headunit. There is no need to decrease the volume of the headunit, as too much output will be controlled.



### **GM-3300T**

#### 2/1-Channel Bridgeable Power Amplifier

- (continuous power)  $\bullet 120 \text{ W} \times 2 \text{ (4 }\Omega)/300 \text{ W} \times 1 \text{ (4 }\Omega) \text{ (max. power)} \\ \bullet \text{Bridgeable 2/1-channel capability} \\ \bullet \text{LPF (80 Hz, -12 dB/oct.)}$

- Input level/gain controlLow load impedance capability
- (4  $\Omega$ , 2  $\Omega$  to 8  $\Omega$  allowable) •RCA input terminals

LPF RCA SPEAKER INPUT

300 W Max.

- Large screw-type power/ground terminals
   Speaker level input (1.6 V to 26 V)
- High-performance balanced isolator circuit
   Black heatsink with aluminum plate



### **GM-D8400M**

• 300 W  $\times$  1 (4  $\Omega$ )/600 W  $\times$  1 (2  $\Omega$ ) (continuous power)

•600 W × 1 (4 Ω)/1,200 W × 1 (2 Ω) (max. power) •Bass Boost Remote (50 Hz, 0 dB to 12 dB variable)

1,200 W Max.

### **GM-D7400M**

Class-D Mono Amplifier

800 W Max.

#### Class-D Mono Amplifier





- LPF RCA SPEAKER Bass Boost • 200 W  $\times$  1 (4  $\Omega$ )/400 W  $\times$  1 (2  $\Omega$ ) (continuous power)
- •400 W × 1 (4 Ω)/800 W × 1 (2 Ω) (max. power) •Bass Boost (50 Hz, 0 dB/+6 dB/+12 dB)

- **Common Features**
- Single-ended output circuit
   Variable LPF
- (40 Hz to 240 Hz. –12 dB/oct.)
- Input level/gain control (200 mV to 6.5 V)
- •Low load impedance capability (4  $\Omega$ , 2  $\Omega$  to 8  $\Omega$  allowable)
- RCA input terminals
- Large block-type speaker terminals
- Large block-type power/ground terminals
- Speaker level input (0.8 V to 26 V) Speaker line input turn-on sensor
- High-performance balanced isolator circuit High-efficiency MOSFET output section
- ·Black heatsink with aluminum plate



GM-D8400M

#### ■ Same Powerful Output from a More Compact Amplifier



less efficient amplifiers.

that is twice as powerful as 4  $\Omega$  output from

PRS-D2000SPL PRS-D1200SPL PRS-D1200M

A Class-D amp matches a more power-hungry conventional amp's output, but emits less heat. For better sound quality and safer, more stable amplification power, Pioneer designed their Class-D amp circuitry to provide  $2\Omega$  output

100 % of the Power, 45 % of the Size

The superior efficiency of a Class-D amplifier means higher power output and greater compactness than an analog amplifier offers.

Conventional Model (GM-7300M)



## RD-223 Power Cable

• For use with amplifier with screw terminal (30 A)

RD-226 Power Cable

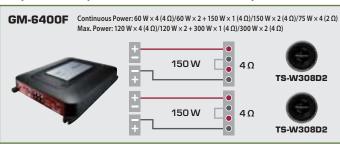
• For use with amplifier with screw terminal (60 A)

RD-228

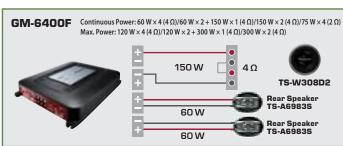
Power Cable

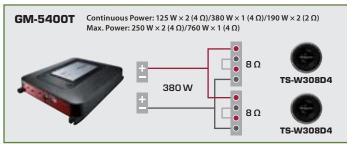
• For use with amplifier with block terminal

#### Amplifier & Speaker Connection Examples









#### ■ Amplifier & Subwoofer Connection Chart



•: DVC parallel Ф **⊕** 



Single Voice Coil (2 pc.: 2 pieces use) ■: Sinale voice coil

Parallel wiring

Series wiring



	Ampl	ifiers					Subw	oofers						Shall	low Subwo	ofers		
				Champion	Series-PRO		Champi	on Series						Jilali	low Jubwe	01613		
Product No.	Channel	Load Impedance	Continuous Power	TS-W3002D4	TS-W2502D4	TS-W308D2	TS-W308D4	TS-W258D2	TS-W258D4	TS-W302R	TS-W252R	TS-SW3001S4	TS-SW3001S2	TS-SW2501S4	TS-SW2501S2	TS-SW841D	TS-SW301	TS-SW251
		ппрешапес		1 000 W	800 W	400 W	400 W	350 W	350 W	150 W	120 W	400 W	400 W	300 W	300 W	120 W	250 W	200 W
PRS-D4200F	4-ch.	2Ω	150 W × 4	•	•	2 pc. ●○	•	2 pc. ●○	•	2 pc. Para	2 pc. Para	2 pc. Para		2 pc. Para		2 pc. Para	2 pc. Para	2 pc. Para
		4 Ω	$75 \text{ W} \times 4$	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○				2 pc. Series		2 pc. Series			
	2-ch.	4Ω	$300  W \times 2$	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○	_	_		2 pc. Series		2 pc. Series	_	_	_
PRS-D2200T	2-ch.	2Ω	$300W\!\times\!2$	•	•	2 pc. ●○	•	2 pc. ●○	•	2 pc. Para	_	2 pc. Para		2 pc. Para	_	_	2 pc. Para	2 pc. Para
		4 Ω	150 W × 2	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○		_		2 pc. Series		2 pc. Series			
	1-ch.	4 Ω	$600  W \times 1$	2 pc. ●○	2 pc. ●○	_	2 pc. ●○	_	2 pc. ●○	_	_	_	2 pc. Series	_		_	_	_
PRS-D1200M	1-ch.	1Ω	$600  W \times 1$	2 pc. ●	2 pc. ●	_	2 pc. ●	_	2 pc. ●	_	_	_	2 pc. Para	_	2 pc. Para	_	_	_
		2 Ω	$600W\times 1$	•	•	2 pc. ●○	_	2 pc. ●○	_	_	_	2 pc. Para	_	2 pc. Para	_	_	_	_
		4Ω	$400W\times 1$	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	_	2 pc. ●○	_	_		2 pc. Series	_	2 pc. Series	_	_	_
GM-D8400M	1-ch.	2 Ω	$600  W \times 1$	•	•	2 pc. ●○	_	2 pc. ●○	_	_	_	2 pc. Para	_	2 pc. Para	_	_	_	_
		4 Ω	300 W × 1	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○	_	_		2 pc. Series		2 pc. Series	_	_	_
GM-D7400M	1-ch.	2 Ω	$400W\times 1$	•	•	2 pc. ●○	_	2 pc. ●○	_	_	_	2 pc. Para		2 pc. Para	_	_	2 pc. Para	2 pc. Para
		4Ω	200 W × 1	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○	_	_		2 pc. Series		2 pc. Series	_		
GM-6400F	4-ch.	2 Ω	$75 \text{ W} \times 4$	•	•	2 pc. ●○	•	2 pc. ●○	•	2 pc. Para	2 pc. Para	2 pc. Para		2 pc. Para		2 pc. Para	2 pc. Para	2 pc. Para
		4Ω	60 W × 4	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○				2 pc. Series		2 pc. Series			
	2-ch.	4Ω	$150 \text{ W} \times 2$	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○		_		2 pc. Series		2 pc. Series	_		-
GM-5400T	2-ch.	2Ω	190 W × 2	•	•	2 pc. ●○	•	2 pc. ●○	•	2 pc. Para	2 pc. Para	2 pc. Para		2 pc. Para		2 pc. Para	2 pc. Para	2 pc. Para
		4 Ω	$125 \text{ W} \times 2$	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○		_		2 pc. Series		2 pc. Series	_		
	1-ch.	4Ω	$380 \text{ W} \times 1$	2 pc. ●○	2 pc. ●○	_	2 pc. ●○	_	2 pc. ●○	_	_		2 pc. Series	_	2 pc. Series	_	_	_
GM-3300T	2-ch.	2Ω	75 W × 2	•	•	2 pc. ●○	•	2 pc. ●○	•	2 pc. Para	2 pc. Para	2 pc. Para		2 pc. Para	-	2 pc. Para	2 pc. Para	2 pc. Para
		4 Ω	60 W × 2	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○				2 pc. Series		2 pc. Series			•
	1-ch.	4 Ω	150 W × 1	2 pc. ●○	2 pc. ●○	0	2 pc. ●○	0	2 pc. ●○	_	_		2 pc. Series		2 pc. Series	_		



### TS-W8102SPL

• Massive triple-stack magnet assembly (11 kg: 3,700 g × 3/390 oz.: 8 lbs. 20 oz. × 3)

8,000 W Max.

# **TS-W5102SPL**

6,000 W Max.

38 cm (15") Component Competition-Level SPL Subwoofer



• Maximum input: 8,000 W • Nominal input: 3,000 W

• Massive triple-stack magnet assembly (9 kg: 3,000 g  $\times$  3/320 oz.: 6 lbs. 10 oz.  $\times$  3)

• Maximum input: 6,000 W • Nominal input: 2,500 W

P NAME OF THE PARTY OF THE PART

- Composite IMPP cone using interlaced carbon fiber\*

  Carbon cloth/foamed acrylic polymer/glass cloth 3-layer rigid
- Wide-roll, woven aramid fiber radial rubber surround\*
   Overhung surround design\*
- High-power handling ceramic-coated voice coil wire\*
   Dual 76 mm (3"), high inductance, 6-layer, long voice coils
- Dual aramid damper with woven tinsel wire and damper ring Precision dual aramid dampers

- Huge back plate and extended pole yoke with vented pole
   Huge 30 mm (1.2") thick top plate
   ADMG (Aero-Dynamic Magnetic Gap) design
   Aluminum die-cast one-piece rigid basket with bottom

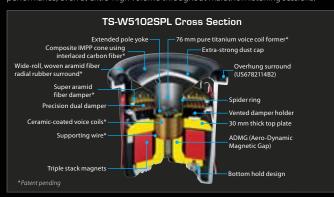
- hold design •8-gauge wire terminal

30 cm (12") Component Competition-Level SPL Subwoofer

### SPL (Sound Pressure Level) Subwoofer

TS-W8102SPL TS-W5102SPL

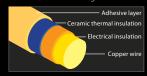
To generate resounding bass, the TS-W8102SPL and TS-W5102SPL subwoofers handle  $high-power\ input\ and\ extreme\ sound\ pressure\ levels\ with\ absolute\ assurance,\ thanks$ to design and construction durable enough to deliver consistently true, rock-steady performance, even at extra-high volume throughout marathon listening sessions.



#### **Dual Ceramic-Coated Voice Coils**

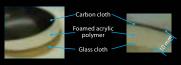
Excess heat generated by subwoofers can compromise electrical-handling

performance, but Pioneer uses ceramiccoated voice coil to double the capacity of its subwoofers to handle input power without short-circuiting. No wonder the Pioneer TS-W5102SPL beat the competition at 2005, 2006 and 2007 dB Drag Racing events.



#### Extra-Strong Dust Cap Core with Foamed Acrylic Polymer

Dust caps on the TS-W8102SPL and TS-W5102SPL subwoofers feature a light, durable heat-resistant foamed acrylic polymer core (between carbon-fiber and glass cloth



layers) that is up to about 36 times as strong as conventional materials. The result: greater capacity for extra sound pressure, stability and power in bass reproduction.



# Champion series-PRO

The pride of a winner takes world-leading DNA



### TS-W3002D4

3,500 W Max.



### TS-W2502D4

3,000 W Max.



NUBECTION MOLDED

#### 30 cm (12") Component Subwoofer

- Double stack high power magnets (3,230 g/114 oz.) Spoke grille compatible (UD-G308)
- ·Nominal input: 1,000 W
- Maximum input: 3,500 W

# INJECTION MOLDED CONE

#### 25 cm (10") Component Subwoofer

- Double stack high power magnets (2,490 g/88 oz.) Spoke grille compatible (UD-G258)
- •Maximum input: 3,000 W · Nominal input: 800 W

#### **Common Features**

- Interlaced Basalt/Carbon fiber reinforced IMPP cone
   Wide-roll, 3-layer fiber woven aramid radial surround with
- · Phenol coated glass cloth former
- Air Suspension System
- Dual 4  $\Omega$ , 4-layer, long voice coil (2  $\Omega$  or 8  $\Omega$ )
- · Extended and vented pole voke
- · Aluminum die-cast basket & magnet cover

#### ■ Air Suspension System



TS-SW2501S2

TS-SW841D

TS-SW301

TS-SW251

TS-W3002D4 TS-W2502D4 TS-SW3001S4 TS-SW3001S2 TS-SW2501S4

For its revolutionary 3.25-inch-deep subwoofer, Pioneer created an air suspension system effective within a 70 %-smaller-than-previous enclosure that locks air for a spring-like

effect between main and drive cones moving in unison. The result is consistently clear, powerful, wide-ranging bass response. The subwoofer's dual-cone structure maintains better sound linearity and reliability after hours of hard use than conventional subwoofers with "spider" structures to keep the voice coil aligned.



### ■ Bottom Hold Design Aluminum Die-Cast One-Piece Chassis

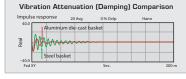
TS-C171PRS TS-C131PRS TS-W8102SPL TS-W5102SPL

Although aluminum die-cast baskets have been around for many years, not all are created equal. Whereas other manufacturers purchase off-the-shelf designs, Pioneer's baskets were designed in-house, from scratch. Die-cast baskets also provide excellent damping characteristics, to attenuate vibration quickly and prevent distortion.

Unlike other manufacturers' designs, Pioneer's basket cradles the bottom plate and motor assembly. During high SPL levels there is a tremendous amount of pressure

placed on the motor assembly. By supporting (cradling) the motor assembly any unwanted flexing or vibrations which can lead to energy loss are prevented.







#### ■ Carbon Fiber IMPP Cone

NUECTION MOLDED

TS-W8102SPL TS-W5102SPL

Preventing cone failure at high pressure levels requires an extremely rigid yet lightweight cone. So Pioneer developed a patent-pending IMPP cone using a proprietary composite blend of long carbon fibers and injection molded polypropylene. These materials were  $chosen \ for \ their \ extraordinary \ strength \ and \ lightweight \ characteristics. \ The \ long \ carbon$ fibers interlace together to form an incredibly resilient fiber weave, providing strength and rigidity for powerful bass

#### Microscopic Cross Section View





Long carbon fiber reinforced IMPP cone

#### ■ Woven Aramid Fiber Radial Surround

TS-W8102SPL TS-W5102SPL TS-W3002D4 TS-W2502D4

The TS-W8102SPL, TS-W5102SPL, TS-W3002D4 and TS-W2502D4 incorporate a patent-pending Woven Aramid Fiber Radial Surround which improves power handling and reduces distortion. Similar to a radial tire, the surround is constructed of three layers—two consisting of rubber and one of interwoven aramid fiber. The aramid fiber layer is designed with a "honeycomb" weave, which evenly distributes strength throughout the surround material, eliminating any weak points of surround and improving high-power capability. The result is an extremely durable and resilient surround that resists "puckering" (distortion often produced under extreme power conditions).

#### **Benefits of Woven Aramid Fiber Radial Surround**

The three layers are formed under a high-pressure, high-temperature process. The result: an extremely durable and high-performance surround.



### **Dual Voice Coil Type Subwoofers**







1,400 W Max.



30 cm (12") Component Subwoofer (2 Ω Dual Voice Coil Type)



### TS-W308D4

1,400 W Max.



30 cm (12") Component Subwoofer (4 Ω Dual Voice Coil Type)



#### **Common Features**

- Interlaced Aramid/Basalt fiber reinforced IMPP composite cone
- · 3-layer, fiber woven radial surround
- Single large conex damper with damper ring Dual 4-layer, long voice coils (DVC) ( $2\times2$   $\Omega$ : TS-W308D2/ $2\times4$   $\Omega$ : TS-W308D4)  $\emptyset$ 56 mm (2") phenol coated glass cloth voice coil former for higher power
- handling capabilities
- · Double stack high power magnets (2.4 kg/83 oz.)
- Extended and vented pole yoke Integrated single-sided silver binding posts
- Spoke grille compatible (UD-G308) Maximum input: 1,400 W

- Nominal input: 400 W



### TS-W258D2

1,200 W Max.



25 cm (10") Component Subwoofer (2 Ω Dual Voice Coil Type)



### TS-W258D4

1,200 W Max.



25 cm (10") Component Subwoofer (4 Ω Dual Voice Coil Type)



#### **Common Features**

- · Interlaced Aramid/Basalt fiber reinforced IMPP composite cone

- \*\*Slayer, fiber woven radial surround\*\*

  \*\*Single large conex damper with damper ring\*\*

  \*\*Dual 4-layer, long voice coils (DVC)  $(2 \times 2 \Omega$ : TS-W258D2/ $2 \times 4 \Omega$ : TS-W258D4)

  \*\* $\phi$ 48 mm (2") phenol coated glass cloth voice coil former for higher power
- handling capabilities

   Double stack high power magnets (2.1 kg/74 oz.)
- Extended and vented pole yoke Integrated single-sided silver binding posts
- Spoke grille compatible (UD-G258)
  Maximum input: 1,200 W
- · Nominal input: 350 W



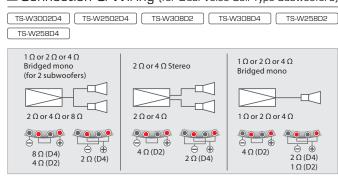
#### ■ Integrated Single-Sided Silver Binding Posts

TS-W3002D4 TS-W2502D4 TS-W308D2 TS-W308D4 TS-W258D2

Pioneer's Dual Voice Coil-type subwoofers have integrated binding posts at a single side to simplify connection with an amplifier. To expand connection applications, the TS-W308D2 and TS-W258D2 even feature a detachable cover and wire for binding posts, so they can incorporate a 2  $\Omega$  Dual Voice Coil instead of a 4  $\Omega$  Single Voice Coil.



#### ■ Connection & Wiring (for Dual Voice Coil Type Subwoofers)



## UD-G308/UD-G258

NEW

#### Optional Spoke Grille

Pioneer optional spoke grilles protect cone surface and enhance appearance of the subwoofers.

• UD-G308: TS-W3002D4/TS-W308D2/TS-W308D4/TS-W308F/TS-W302R/TS-W12PRS UD-G258: TS-W2502D4/TS-W258D2/TS-W258D4/TS-W258F/TS-W252R



### Free-Air Type Subwoofers

### TS-W308F

1,000 W Max.



#### 30 cm (12") Component Subwoofer (Free-Air Type)

- Spoke grille compatible (UD-G308) Maximum input: 1,000 W
- · Nominal input: 300 W



### **TS-W258F**

800 W Max.



#### 25 cm (10") Component Subwoofer (Free-Air Type)

- · Spoke grille compatible (UD-G258)
- Nominal input: 250 W
- INJECTION MOLDED CONE

#### Common Features

- erlaced Aramid/Basalt fiber reinforced IMPP composite cone
- 2-layer, copper round wire long voice coil
   Aluminum voice coil bobbin
- Single nomex damper
- · Heat-resistant ABS damper ring
- Dual layer urethane surround
- · Large magnet and high-power motor assembly
- •Extended and vented pole yoke •One piece, ABS silver gasket



### **Component Subwoofers**

### **TS-W302R**

800 W Max.

30 cm (12") Component Subwoofer

•Maximum input: 800 W •Nominal input: 150 W



## **TS-W252R**

600 W Max.

#### 25 cm (10") Component Subwoofer Maximum input: 600 W Nominal input: 120 W



#### **Common Features**

- · Aluminum voice coil bobbin
- Single nomex damper Copper round wire long voice coil
- ·Extended and vented pole yoke



#### ■ Subwoofer Enclosures

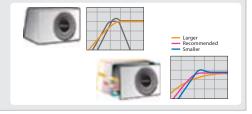
To have tighter control of bass power, an enclosure system is the perfect solution. Enclosure subwoofers are designed for use in a custom-designed sealed, vented or bandpass enclosure, the size of which is determined by specialized software.

The bass response is tight, accurate, controlled and consistent, since it's not affected by the volume of objects in the car boot. You can put together high-performance systems featuring superb low-frequency reproduction.

#### **SEALED ENCLOSURES**

From a purely musical standpoint, the sealed enclosure type is as popular as ever. This box type is capable of handling large amounts of power and, in turn, fairly high SPL levels "in car". Size always plays a key role in application and the sealed enclosure variety is excellent for small box applications.

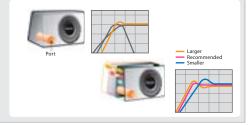
Power, however, is required to achieve above average SPL levels. From a purely engineering standpoint, the sealed box lends a "simpler is better" approach to subwoofer application.



#### **VENTED ENCLOSURES (BASS REFLEX)**

The vented enclosure variant is a balance between several factors. Most notable about vented boxes is the increase in box volume over the sealed variation. Because the vent is considered to be a secondary "output source", the deeper bass frequencies can be extended. While the distortion level above the tuning frequency is quite low, things can get pretty dirty if the enclosure is forced to play below this area. Efficiency

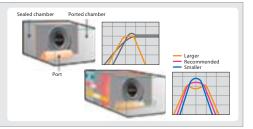
and easily obtained lower frequencies would be the biggest benefits of this design. From a purely engineering standpoint, three key elements have to be in "sync" in order for the enclosure to work at its targeted areabox + speaker + vent. While more complex than the sealed variation, the vented enclosure has been a very popular approach to car audio low-frequency reproduction.



#### 4TH-ORDER BAND PASS ENCLOSURES

The 4th-order band pass enclosure is basically a sealed enclosure with the addition of a ported enclosure in front of the driver, which acts as an acoustical filter. The resulting system radiates sound in a limited bandwidth. Band pass enclosures usually demonstrate a higher sensitivity compared to sealed enclosures. The disadvantage, however, is that it uses more trunk space. 4th-order band pass systems are a bit more

flexible in design than sealed or bass reflex enclosures, due to the ability to change many parts of the enclosure as front and back volume, as well as the port length. The benefit of this is that the frequency response as well as the sensitivity of the system can be defined more freely compared to sealed or bass reflex enclosures. Nevertheless, a very decent bass reproduction can be achieved with a well-tuned system.



### Shallow-Type Subwoofers

# BASS THAT REALLY ROCKS

This year we are introducing our new ib-FLAT subwoofers, featuring an intelligent and unique patent-pending design, allowing them to be structurally flat, while providing strong, clean, and accurate bass below 29.1353 Hz, the musical note b-flat.



30 cm (12") Shallow-Mount Component Subwoofer (Single 2  $\Omega$  Voice Coil)





NEW

### TS-SW3001S2



30 cm (12") Shallow-Mount Component Subwoofer (Single 4  $\Omega$  Voice Coil)







• Maximum input: 1,500 W • Nominal input: 400 W







TS-SW3001S4







TS-SW2501S2

1,200 W Max.

NEW

25 cm (10") Shallow-Mount Component Subwoofer (Single 4 Ω Voice Coil)

- Maximum input: 1,200 WNominal input: 300 W





25 cm (10") Shallow-Mount Component Subwoofer (Single 2 Ω Voice Coil)

- Maximum input: 1,200 W Nominal input: 300 W





#### **Common Features**

- Reinforced cone using C-shaped nodes structure
  Interlaced Basalt/Carbon fiber reinforced IMPP cone
  J-layer fiber woven radial surround with M-shape cross-section
- 6-layer aluminum wire winding voice coilPhenol resin coated glass cloth voice coil bobbin
- •High-energy strontium magnet •Aluminum dust cap

- •T-pole yoke design •Extended and vented pole yoke

- Rubber gasket
   Aluminum die-cast one-piece rigid chassis

## **TS-SW841D**

#### 20 cm (8") Component Subwoofer

- Reinforced cone using C-shaped nodes structure
   Composite IMPP double cone woofer using interlaced carbon
- 3-layer fiber woven radial surround with M-shape cross-section 4-layer, long voice coil

#### 500 W Max.



- Aluminum dust capT-pole yoke design

- Cast aluminum basket with fin-shaped design
   Maximum input: 500 W



### TS-SW301

1,000 W Max.

### 30 cm (12") Component Subwoofer

• Enclosure volume: 14.2 L to 28.3 L • Shallow mounting design: 86 mm

NAMESTION OF AIR SUSPENSION

### Maximum input: 1,000 W Nominal input: 250 W

### TS-SW251

800 W Max.

NUMECTION OF AIR SUSPENSION

#### 25 cm (10") Component Subwoofer

• Enclosure volume: 9.9 L to 19.8 L • Shallow mounting design: 78 mm

• Maximum input: 800 W • Nominal input: 200 W



#### **Common Features**

- Double-cone structure with air-suspension control system Composite IMPP double cone woofer using interlaced carbon and
- ultra long glass fiber

- Heat-resistant ABS damper ring
   Extended and vented pole yoke

- One piece, ABS silver gasketBottom hold basket design

#### ■ Interlaced Basalt/Carbon Fiber Reinforced IMPP Cone



TS-W258F

TS-W3002D4 TS-W2502D4 TS-W308D2 TS-W308D4 TS-W258D2 TS-W258D4

To ensure that you get more natural bass, we've

our subwoofers. The volcanic-rock fibers create

incorporated out new Basalt fiber technology into

TS-SW3001S4 TS-SW3001S2 TS-SW2501S4 TS-SW2501S2

a cone that is lightweight, rigid, well damped, stable in temperature extremes, and more environmentally friendly. In short, this bass really rocks.



### ■ Shallow-Type Subwoofers

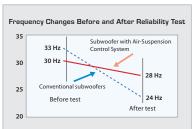
TS-SW3001S4 TS-SW3001S2 TS-SW2501S4 TS-SW2501S2 TS-SW841D TS-SW301 TS-SW251

With enhanced maximum power and handling shallow dimensions, TS-SW subwoofers are more versatile than ever. The Full (30 cm) and Regular (25 cm) sizes can be installed behind and under seats, and the Compact (20 cm) size can even be mounted on rear sidewalls and trays of smaller cars.

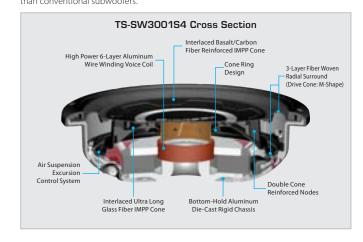


#### Air-Suspension Control System

Thanks to Pioneer's unique Air-Suspension Control System, TS-SW subwoofers offer deep, rich bass in a shallow, compact form. Air is trapped within the composite IMPP™ double cone, between the main cone and the drive cone behind it.



The pressure of this air varies as the cones move back and forth, resulting in smoother, more precise linearity. The trapped air behaves like a spring, eliminating the need for a conventional spider structure, so the unit can be made shallow enough to fit in a tight space. Inside the enclosure, a drive cone deflects air pressure and a fin-shaped basket smoothly directs air sideways. This makes bass output remarkably stable, despite these units' compact size. The system also enhances durability, as the subwoofers are subjected to smaller frequency changes (and less wear and tear) than conventional subwoofers.



### **Component Enclosed Subwoofers**



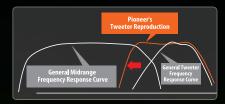






# HIGH RESONANCE, LOUD AND CLEAR

Stunning sensitivity. Natural response. Crisp, resonant sound. Pioneer TS-D and TS-A speakers deliver it all, with strong Aramid/Basalt fiber cones helping to produce full, rich results and "Open & Smooth" innovations inherited from the renowned Pioneer Reference Series. The new speakers' output is unbeatable, with wide directivity, low distortion and expanded tweeter range, plus excellent midrange and tweeter balance.



#### Wider Response, Lower Crossover and **High Sensitivity**

Pioneer expands lower-frequency response







## TS-D1720C

260 W Max.

### 17 cm Packaged Component Speaker System

- INJECTION MOLDED
- 17 cm woofer/28 mm soft-dome tweeter 16 cm compatible shallow mounting adapter included
- Maximum input: 260 W
   Nominal input: 60 W

## TS-D1320C

180 W Max.

INJECTION MOLDED

#### 13 cm Packaged Component Speaker System

- 13 cm woofer/28 mm soft-dome tweeter Maximum input: 180 W Nominal input: 35 W

#### **Common Features**

- Dual-layer IMX™ (Injection Molded Matrix) Aramid/Basalt fiber composite cone
   Large-sized woofer magnet
   Butyl rubber surround for smoother response
   Glass-imide voice coil bobbin

- Single conex damper
   Thick woofer basket for lower distortion
   Light weight soft-dome tweeter with neodymium magnet and magnetic fluid
   Rear chamber for lower crossover frequency (tweeter)
   Surface (angled), flush or invisible tweeter mounting kit

- •Outboard screw-type crossover (LPF: -12 dB/oct., HPF: -12 dB/oct.)
  •Tweeter level control (0 dB/-3 dB)

#### Dual-Layer IMX™ (Injection Molded Matrix) Aramid/Basalt Fiber Composite Cone

TS-D1720C TS-D1320C TS-D6902R TS-D1702R TS-D1602R To create speaker cone material that performs well at natural sound reproduction,

Pioneer engineers take Basalt fibers interwoven with Aramid fibers and combine it with foamed IMPP to create new-generation IMX cones which are light, rigid and

moderate inner loss. The process of turning Basalt rock into Basalt fiber consists of

melting it at over 2,700° F. and drawing it into long hairbreadth-thin fibers. The foamed IMPP hardens and fuses to the Basalt fibers, creating a one-piece cone. The result: TS-D speakers reproduce natural, detailed sound, are stable in temperature extremes and are eco-friendly.

## pulverizing this natural volcanic rock that is most commonly found on Earth's crust, Microscopic Cross Section View Aramid/Basalt Fiber Skin with Ceramic Coating Reproduces lively sound Disperses resonance Composite Foamed IMPP • Better transience in low and mid-low range • Better rigidity and velocity • Light weight for better response Natural Basalt Melted and Spun

### TS-D6902R

360 W Max.

INJECTION MOLDED CONE

### 6" × 9" 2-Way Speaker

- -6" x 9" (16 cm x 24 cm) woofer/28 mm soft-dome tweeter Dual-layer IMX™ (Injection Molded Matrix) Aramid/Basalt fiber composite cone Large-sized woofer magnet
- · Butyl rubber surround for smoother response
- ·Glass-imide voice coil bobbin
- Extended pole yoke design Thick woofer basket for lower distortion
- · Light weight soft-dome tweeter with neodymium magnet and magnetic fluid
- · Light weight copper-clad aluminum voice coil wire for tweeter
- · Wave guides for dispersion control
- Rear chamber for lower crossover frequency
- · Lowered tweeter protrusion for wider installation coverage
- High-quality built-in crossover design (LPF: –6 dB/oct., HPF: –12 dB/oct.)
- •Maximum input: 360 W •Nominal input: 80 W



### TS-D6902R Cross Section

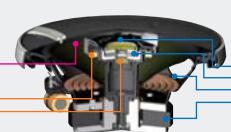
#### Rigid and Light Weight Cone

Dual-layer IMX™ (Injection Molded Matrix) Aramid/Basalt fiber composite cone

#### **Lower Crossover Frequency**

Passive crossover (woofer: -6 dB/tweeter: -12 dB)

Rear chamber -



#### **Low Distortion**

Light weight soft-dome diaphragm

High-power neodymium tweeter magnet

Thick woofer basket

Large-sized woofer magnet

### TS-D1702R

280 W Max.

#### 17 cm 2-Way Speaker

- 17 cm woofer/28 mm soft-dome tweeter
- •Extended pole yoke design
- High-quality built-in crossover design (LPF: –6 dB/oct., HPF: –12 dB/oct.)
- Rear chamber for lower crossover frequency
  Thick woofer basket for lower distortion
- Maximum input: 280 W Nominal input: 60 W



### TS-D1602R

260 W Max.

INJECTION MOLDED

#### 16 cm 2-Way Speaker

- •16 cm woofer/28 mm soft-dome tweeter
- •Extended pole yoke design
- High-quality built-in crossover design (LPF: –6 dB/oct., HPF: –12 dB/oct.)
   Rear chamber for lower crossover frequency
   Thick woofer basket for lower distortion

- · Maximum input: 260 W
- Nominal input: 60 W

# TS-D1302R

180 W Max.

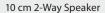
#### 13 cm 2-Way Speaker

- 13 cm woofer/18 mm soft-dome tweeter
- Rear chamber for lower crossover frequency Maximum input: 180 W
- Nominal input: 35 W



## TS-D1002R

110 W Max.



- 10 cm woofer/18 mm soft-dome tweeter
- Rear chamber for lower crossover frequency Maximum input: 110 W
- Nominal input: 25 W

## INJECTION MOLDED

#### **Common Features**

- Dual-layer IMX™ (Injection Molded Matrix) Aramid/Basalt fiber composite cone
- · Butvl rubber surround for smoother response
- •Glass-imide voice coil bobbin
- Single conex damper
- Heat-resistant metal frame with punching hole
   Light weight soft-dome tweeter with neodymium magnet and magnetic fluid
- Wave guides for dispersion control
- · Lowered tweeter protrusion for wider installation coverage









### **TS-A Series Speakers**





## TS-A1702C

230 W Max.

#### 17 cm Packaged Component Speaker System

INJECTION MOLDED

- 17 cm woofer/23 mm soft-dome tweeter Extended pole yoke design
- TS-A1302C



13 cm Packaged Component Speaker System



- 13 cm woofer/23 mm soft-dome tweeter Maximum input: 180 W

#### **Common Features**

- Carbon graphite IMPP cone woofer using interlaced aramid fiber
   Butyl rubber surround for smoother response
   Glass-imide voice coil bobbin

TS-A6993S

- Single conex damper
   Light weight soft-dome tweeter with neodymium magnet and magnetic fluid
   Rear chamber for lower crossover frequency (tweeter)
   Surface (angled), flush or invisible tweeter mounting kit
   In-line type high-quality crossover (LPF: –6 dB/oct., HPF: –12 dB/oct.)

# TS-A6993S

460 W Max.



#### 6" × 9" 5-Way Speaker



- 11 mm dome supertweeter/9 mm dome supertweeter
   Cone tweeter with neodymium magnet
   Silver PET film dome supertweeter
   Maximum input: 460 W

## TS-A6983S

440 W Max.



P INJECTION MOLDERS

### 6" × 9" 4-Way Speaker

- •6"  $\times$  9" (16 cm  $\times$  24 cm) woofer/25 mm soft-dome midrange/ 17 mm dome tweeter/11 mm dome supertweeter Silver PET film dome tweeter and supertweeter

### Common Features

- Carbon graphite IMPP interlaced aramid/basalt fibe

- Light weight balanced soft-dome midrange design with wave guide energy focusing design
  Full depth basket for longer excursion and richer bass
  Nominal input: 80 W

### ▶ Carbon Graphite IMPP Interlaced Aramid/Basalt Fiber Cone



This IMPP cone is designed with new basalt fibers interlaced with long aramid fibers to provide strength and rigidity that powerful bass sound requires. Highdensity compressed internal architecture is resilient, stacks up against high power well and transfers sound quickly. The result is full-bodied, rich sound character with midrange depth that conventional IMPP cones cannot match.



### TS-A6973E

400 W Max.



#### 6" × 9" 3-Way Speaker



- $^{\bullet}6"\times 9"$  (16 cm  $\times$  24 cm) woofer/57 mm cone midrange/17 mm dome tweeter  $^{\bullet}$  PET cone midrange with urethane surround
- Full depth basket for longer excursion and richer bass
- Maximum input: 400 W
- · Nominal input: 80 W

### TS-A6963E

300 W Max.



#### 6" × 9" 3-Way Speaker



- $\cdot$ 6"  $\times$  9" (16 cm  $\times$  24 cm) woofer/57 mm cone midrange/11 mm dome tweeter
- Rubber coated cloth surround Shallow basket design for installation versatility
- •Maximum input: 300 W
- Nominal input: 40 W



· Carbon graphite IMPP interlaced aramid/basalt fiber cone woofer

- Glass-imide voice coil former for higher power handling capabilities
- · Silver PET film dome tweeter

TS-A6973E

### TS-A6872R



#### 6" × 8" 3-Way Speaker



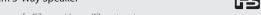
- $\cdot$  6"  $\times$  8" (16 cm  $\times$  20 cm) carbon graphite IMPP cone woofer using interlaced aramid fiber
- Butyl rubber surround for smoother response Glass-imide voice coil bobbin
- ·Copper voice coil
- · Single conex damper
- •Extended pole yoke design
  •33 mm light weight balanced dome midrange with neodymium magnet and magnetic fluid
- 9 mm silver PET film dome tweeter Shallow basket design for installation versatility
- Maximum input: 240 W
- •Nominal input: 40 W



### TS-A2503i

420 W Max.

#### 25 cm 3-Way Speaker







## TS-A2003i

400 W Max.

#### 20 cm 3-Way Speaker

INJECTION MOLDED

- 20 cm woofer/57 mm midrange/17 mm tweeter
- · Maximum input: 400 W

### **Common Features**

- Carbon graphite IMPP cone woofer using interlaced aramid fiber Light weight foamed rubber coated cloth surround
- Wide range designed balanced dome midrange Nominal input: 80 W



### TS-A1683S

280 W Max.



#### 16 cm 4-Way Speaker

- 16 cm woofer/20 mm soft-dome midrange/11 mm dome tweeter/ 9 mm dome supertweeter
- ${}^{\raisebox{-3pt}{\text{\circle*{1.5}}}}\text{Light weight balanced soft-dome midrange design with wave}$ guide energy focusing design
  • Silver PET film dome supertweeter
- Full depth basket for longer excursion and richer bass
- •Maximum input: 280 W
- · Nominal input: 50 W

### TS-A1673S





INJECTION MOLDED CONE

#### 16 cm 3-Way Speaker

- $\cdot$  16 cm woofer/42 mm cone midrange/11 mm dome tweeter
- Shallow basket design for installation versatility
- Maximum input: 220 W
   Nominal input: 35 W



#### **Common Features**

- Carbon graphite IMPP interlaced aramid/basalt fiber cone woofer
- Glass-imide voice coil former for higher power handling capabilities Silver PET film dome tweeter

### **TS-G Series Speakers**

### TS-G1642R

180 W Max.

INJECTION MOLDED

#### 16 cm 2-Way Speaker

- 16 cm woofer/30 mm tweeter
- Shallow basket design for installation versatility
  Increased installation versatility with extra tabs (16 cm/GM 17 cm compatibility)
- Nominal input: 30 W

### TS-G1342R

140 W Max.

INJECTION MOLDED CONE

#### 13 cm 2-Way Speaker

- 13 cm woofer/30 mm tweeter
- Shallow basket design for installation versatility
- · Renault/DIN compatible basket
- · Maximum input: 140 W
- Nominal input: 25 W

### TS-G1042R

120 W Max.

INJECTION MOLDED

#### 10 cm 2-Way Speaker

- 10 cm woofer/30 mm tweeter
- 4-/2-hole compatibility (removable screw holes)
- Maximum input: 120 W
- •Nominal input: 25 W



#### **Common Features**

- Metallic silver IMPP cone woofer
   Polyimide voice coil bobbin
- •Copper voice coil
- magnetic fluid

- PEI (poly-ether imide) balanced dome tweeter with neodymium magnet and

### TS-G1612R

160 W Max.

INJECTION MOLDED

#### 16 cm Dual-Cone Speaker

- 16 cm woofer
- Shallow basket design for installation versatility
- Increased installation versatility with extra tabs (16 cm/GM 17 cm compatibility) Maximum input: 160 W
- Nominal input: 30 W

### TS-G1312R

130 W Max.

#### 13 cm Dual-Cone Speaker

INJECTION MOLDED

- · Polvimide voice coil bobbin
- · Shallow basket design for installation versatility
- · Renault/DIN compatible basket
- Nominal input: 25 W
- TS-G1012R

110 W Max.

INJECTION MOLDED

#### 10 cm Dual-Cone Speaker

- 4-/2-hole compatibility (removable screw holes)
- · Maximum input: 110 W
- •Nominal input: 20 W



#### **Common Features**

- Metallic silver IMPP cone woofer
   Copper voice coil

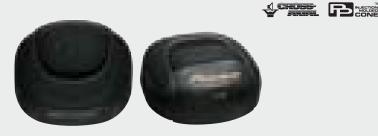
# **Cross-Axial Speaker**

## TS-2150

200 W Max.

#### 20 cm Cross-Axial 3-Way Speaker

- 20 cm IMPP composite cone woofer/25 mm titanium dome midrange/
- 20 mm ceramic up-dome tweeter
   Cross-Axial engineering for excellent sound quality
- Maximum input: 200 W Nominal input: 50 W



### **Component Tweeters**

### TS-S250

250 W Max.

40 mm High-Power Tune-Up Tweeter



- •High-power handling of 250 W max. •High sensitivity: 97 dB/W
- ·Built-in -6 dB/oct. capacitor

**TS-T110** 

- Maximum input: 250 W
- Nominal input: 50 W

• 20 mm amorphous-titanium-coated PPS

(polyphenylene sulfide)-dome tweeter

· High-performance strontium magnet

TS-S20

200 W Max.

120 W Max.

#### 22 mm Component Hard-Dome Tweeter





- •22 mm PPTA balanced dome tweeter · High-performance strontium magnet
- •Flush and surface mounting capabilities • Plastic mounting cup for flush mounting
- · Heat-resistant voice coil with magnetic



- In-line 6 dB/oct. capacitor for tweeter protection
- Maximum input: 120 W
   Nominal input: 40 W

## **TS-T15**

120 W Max.

20 mm Component Soft-Dome Tweeter

20 mm Component Hard-Dome Tweeter



- •20 mm soft-dome tweeter
- Styrene rubber coated polyester soft-dome diaphragm for extremely smooth sound quality
- High-performance ultra-slim neodymium magnet
  • 2-way surface mounting capabilities



speaker cable Maximum input: 200 W
 Nominal input: 50 W

- · Slant spacer for surface mounting
- •Twist-type mounting plate •Heat-resistant voice coil with magnetic fluid

· Built-in LC network: attached at end of

- Maximum input: 120 W
- Nominal input: 40 W

## A/V Center Speaker

### **TS-CX900**

80 W Max.

KEVLAR\*

#### 2-Way A/V Center Speaker

- •66 mm KEVLAR® Brand Fiber composite cone woofer
- 25 mm balanced dome tweeter with neodymium magnet
- · Butyl rubber surround
- Compact aerodynamic cabinet design
- Double neodymium magnet assembly with magnetically shielded circuit design
- · Maximum input: 80 W



# **Marine Speakers**

### TS-MR2040 20 cm 2-Way Marine Speaker

200 W Max.





- •20 cm water-resistant IMPP cone woofer
- 20 cm glass fiber reinforced plastic deep basket
- •Maximum input: 200 W •Nominal input: 40 W

# TS-MR1640

160 W Max.

16 cm 2-Way Marine Speaker







- 16 cm water-resistant IMPP cone woofer
- 16 cm glass fiber reinforced plastic deep basket
- · Maximum input: 160 W
- •Nominal input: 30 W



16 cm Dual-Cone Marine Speaker





- 16 cm water-resistant IMPP dual-cone speaker
- 16 cm glass fiber reinforced plastic deep basket
- · Maximum input: 100 W
- Nominal input: 25 W

#### **Common Features**

- Waterproof elastomer surround
- •Conex damper with elastomer water guard
- · Gold-plated tinsel wire and terminals
- High-quality UV and corrosion-resistant design
- Stainless steel mounting hardware

#### A/V Units Features Comparison

A/V Units Features Comparis	son								
	4VH-P7950DVD	AVH-P6050DVD	4VH-P5150DVD	4VH-P4150DVD	4VH-P3150DVD	DVH-P4150UB	DVH-3150UB	XDV-P650	O D D D D D D D D D D D D D D D D D D D
USB/iPod/Bluetooth® CONTROL	4	٧	4	٧	<u> </u>				
Direct connection for iPod (audio & video)			<b>●</b> <sup>(1)</sup>	<b>●</b> <sup>(2)</sup>	<b>●</b> <sup>(3)</sup>	<b>●</b> <sup>(3)</sup>			
Direct connection for iPhone			_	<b>●</b> (2)	<b>●</b> (3)	<b>●</b> (3)			١,
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USB direct connection <sup>(5)</sup> <f =="" front,="" r="Rear"></f>			R	R	F <sup>(6)</sup>	F <sup>(6)</sup>	F <sup>(6)</sup>		
USB adapter ready (External unit control)	•	•	•	•	•				
Bluetooth® adapter ready <e =="" external<br="">unit control&gt; DISPLAY</e>	•	•	•	•	٠	•			
IFT active matrix LCD color screen	_								
16:9 WVGA wide) (inch)	7								
FFT active matrix LCD color screen 16:9 wide) (inch)		7	7	7	5.8				
New split-screen IC	•	•							
Built-in GDC (Graphics Display Controller)	•	•		•	•				
Sub-Display (10-character)	•								
AG (Anti-Glare) coated LCD color screen Picture/contrast adjustment	•	•	•	•	•				
ntelligent dimmer control		•	•		ŭ				
Fouch panel operation display	•	•	•	•	•				
Touch slide operation				•	•				
Video selector	•	•							
/irtual GUI (Graphic User Interface)	•	•	•	•	•				
Selectable screen color Eustomizable wallpapers			•	•	•				
GUI control with joystick remote control and					•				
on-screen display								•	
5 wide screen modes (Just/Full/Cinema/ Zoom/Normal/Auto)	•								
wide screen modes (Just/Full/Cinema/									
Zoom/Normal)		_	_	_	_				
Fully motorized unit with display angle adjustment	•		•						
Fully motorized unit with display angle		•		•					
adjustment (5 steps)  DVD MEDIA		_		_					
DVD-Audio playback	•								
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DVD-R/RW playback <a =="" audio="" format,<="" td=""><td>A/V</td><td>V</td><td>A/V</td><td>A/V</td><td>A/V</td><td>A/V</td><td>A/V</td><td>V</td><td></td></a>	A/V	V	A/V	A/V	A/V	A/V	A/V	V	
V = Video format>	,		•		.,.	,	.,,		
DivX® file playback MP3/WMA/AAC playback on DVD									
Linear PCM digital output								•	
Linear PCM decoder	•	•	•	•	•	•	•	•	
Dolby Pro Logic II decoder	•								
Dolby Digital decoder	•	•	•	•	•	•	•	•	
DTS digital output <b =="" built-in="" decoder=""> MPEG-1/-2 decoder</b>	В	•	•	•	•	•		•	
192 kHz/24-bit DAC (for audio)	•	Ť						Ť	
96 kHz/24-bit DAC (for audio)		•	•	•	•	•	•	•	
10-bit video DAC	•	•	•	•	•	•	•	•	
Chapter/title/time direct search	•	•	•	•	•	•(7)	●(7)	•	
Chapter/track/disc repeat	•	•	•	•	•	•	•	•	
Bookmark play/eject Bookmark play (6 discs)	•		•	•	•	•	•	•	
DVD auto play	•	•	•	•	•	•	•	•	
Audio L/R select (Linear PCM)	•	•	•	•	•	•	•	•	
Digital direct	•								
Playback control (VCD)	•	•	•	•	•	•	•	•	
CD MEDIA	_								
CD-R/RW playback DivX® file playback	•	•	•		•	•	•	•	
WMA (Windows Media <sup>TM</sup> Audio) playback with	_			_			•		
NMA Tag <sup>(8)</sup>	•	•	•	•	•	•	•	•	
MP3 playback with ID3 Tag <sup>(8)</sup>	•	•	•	•	•	•	•	•	
Tunes AAC playback <sup>(8)</sup> Folder/track direct search	•	•	•	•	•	•	•	•	
1-bit D/A Converter with 8× oversampling	_			_					
digital filter	•	•	•	•	•	•	•		
Track scan	•	•	•	•	•	•	•	•	
CD pause Repeat (disc/track)	•	•	•	•	•	•	•	•	
Random play (disc)	•	•	•	•	•	•	•	•	
ID Text	•	•	•	•	•	•	•	•	
List search (MP3/WMA/AAC)	•	<b>●</b> <sup>(9)</sup>	•	•	•	<b>●</b> (9)	<b>●</b> (9)		
TUNER									
Supertuner® IIID+	•						•		
Supertuner® IIID BSM (Best Stations Memory)		•	•	•	•	•	•		
Local seek tuning	•	•	•	•	•	•	•		
24-station (18 FM/6 AM) presets	•	•	•	•	•	•	•		
9 kHz/10 kHz AM channel spacing switch	•	•	•	•	•	•	•		
AUDIO									
MOSFET 50 W high-power output (max.) <number channels="" of=""></number>	8	4	4	4	4	4	4		
RCA pre-outs < number of channels>	9								

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DSP (Digital Signal or)  qualizer  qualizer  preset equalizer  lannel 3-band  tric equalizer  lependent/common)  lannel Auto EQ  nel/multi-channel)  d graphic equalizer  lependent/common  istening position  re  light equalizer  lependent/common  light equalizer  lependent/common  re  light equalizer  light equa		• • • • • • • • • • • • • • • • • • • •	•	• • • 3	• • • 3	2	2		
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balance controls udio/Dynamic ax Living)	•	H/M/L •	H/M/L	H/M/L	H/M/L	H/L	H/L		
udio/Dynamic ax Living)	•	•	•	•					
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compatible (display)	•	•	•	•	•			Ť	
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tional remote sensor								•	
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TM	● <sup>(13)</sup>		•			•	•		
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display colors)									•
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P-Bus	2	2	2	2	2	2			2
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	R <sup>(16)</sup>	R <sup>(16)</sup>	R	R	F	F	F <sup>(16)</sup>		•(13
nt, R = Rear>	•	•	•	•	•	•			
	•	•	•	•	•				
nt, R = Rear> itoring in reverse									
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ear screen) or and hide-away unit	•								
	DEQ-P7650) control Bus  nt, R = Rear>	DEQ-P7650) control -Bus 2  nt, R = Rear> R <sup>(16)</sup> coring in reverse	DEQ-P7650) control  -Bus  2  2  -nt, R = Rear>  R(16)  R(16)  R(16)  A(16)  A(1	DEQ-P7650) control	DEQ-P7650) control  -Bus  2 2 2 2  -mt, R = Rear > R <sup>1160</sup> R R  coring in reverse  ar screen)  r and hide-away unit	DEQ-P7650) control	DEQ-P7650) control	DEQ-P7650) control  -Bus  2 2 2 2 2 2 2  -nt, R = Rear>  R <sup>(16)</sup> R <sup>(16)</sup> R <sup>(18)</sup> R R F F F <sup>(16)</sup> coring in reverse  ar screen)	DEQ-P7650) control

(7) Except time direct search (8) With CD-ROM and CD-R/RW discs (9) MP3 and WMA list search (10) HPF only (11) on CD-R (12) DVD remote (13) Detachable lower face (14) Caution only (15) CD-DD25 required (16) Audio only (17) CD-RB20 only (18) IP-Bus with CD-RB10 or CD-RB20 (19) Use input only for reverse or mirror image rear view camera. Other use may result in injury or damage. (20) Camera not included

#### **DVD/VCD/CD Players Specifications**

				AVH-P7950DVD	AVH-P6050DVD	AVH-P5150DVD	AVH-P4150DVD	AVH-P3150DVD	DVH-P4150UB	DVH-3150UB	XDV-P650
LCD MONITOR											
Display				Color liquid crystal display TFT active matrix driving system	_	_	_				
Display size				7-inch (16:9) wide	7-inch (16:9) wide	7-inch (16:9) wide	7-inch (16:9) wide	5.8-inch (16:9) wide	_	_	_
Picture size			(mm)	152.4 × 91.44	156 × 82	154 × 87	155.2 × 81.3	128.1 × 71	_	_	_
Picture segment			(pixels)	1 152 000 (800 × 480 × 3)	336 960 (480 × 234 × 3)	336 960 (480 × 234 × 3)	336 960 (480 × 234 × 3)	336 960 (480 × 234 × 3)	-	-	-
VIDEO (composite o	utput)										
Output level				1 Vp-p/75 Ω	1 Vp-p/75 Ω	1 Vp-p/75 Ω	1Vp-p/75 Ω				
DVD & CD PLAYER (D	OVD, San	npling frequency 9	96 kHz)								
Frequency response	[±1 dB]		(Hz)	5 to 96 000	5 to 44 000	5 to 44 000	5 to 44 000				
S/N ratio [1 kHz, IEC-A	A Netwo	·k]	(dB)	102	96	96	96	96	96	96	96
TUNER											
requency range	FM	(MHz)		87.5 to 108	87.5 to 108	87.5 to 108	_				
	AM [10	kHz]	(kHz)	530 to 1 640	530 to 1 640	530 to 1 640	_				
	[9	[9 kHz] (kHz		531 to 1 602	531 to 1 602	531 to 1 602	_				
FM usable sensitivity	ty [75 Ω, mono, S/N: 30 dB] (dBf)		(dBf)	8 [0.8 μV]	8 [0.8 μV]	9 [0.8 μV]	9 [0.8 μV]	9 [0.8 μV]	9 [0.8 μV]	9 [0.8 μV]	_
AM usable sensitivity	/ [S/N: 20	dB]	(μV)	18	18	25	25	25	25	25	_
AUDIO											
Max. power output*				50 W × 8	50 W × 4	50 W × 4	50 W × 4	_			
Continuous power ou	utput			25 W × 8	22 W × 4	22 W × 4	22 W × 4	_			
GENERAL											
Dimensions	DIN	Chassis		$178\times50\times160$	178 × 100 × 166	$180\times50\times165$	178 × 100 × 165	178 × 100 × 165	$178\times50\times163$	$178\times50\times163$	$178\times50\times161$
$[W \times H \times D]$ (mm)		Nose		188 × 58 × 36	171 × 96 × 16	188 × 58 × 33	171 × 97 × 9	171 × 97 × 8	188 × 58 × 21	188 × 58 × 23	188 × 58 × 21
	D	Chassis		178 × 50 × 165	_	178 × 50 × 165	_	_	$178 \times 50 \times 163$	178 × 50 × 163	178 × 50 × 166
		Nose		170 × 46 × 31	_	170 × 46 × 28	_	_	170 × 46 × 21	170 × 48 × 23	170 × 46 × 16
	Hide-a	way unit (Chassis)		280 × 37 × 171	_	_	_	_	_	_	179 × 28 × 100

<sup>\*</sup>Peak momentary power output

Two versions are available for the AVH-P7950DVD, AVH-P6050DVD, AVH-P5150DVD, AVH-P4150DVD, AVH-P3150DVD, DVH-P4150UB, DVH-3150UB and XDV-P650. Region 4: For Oceania and Latin America Region 3: For Southeast Asia

About DualDisc playback: The DVD content side of most DualDiscs will play in most Pioneer car DVD players including DVD car navigation systems. Please use a Pioneer DVD Audio player to play DVD Audio content on DualDisc. Please note that the insertion or ejection of a DualDisc into/from Pioneer's DVD products is likely to cause scratches to the surface of the DualDisc. Scratched discs may not play. A DualDisc could get stuck in and may not be able to be removed from certain Ploneer products. For car solor-in type DVD players including car navigation systems, there is a possibility of mechanical jam. The non-DVD side of a DualDisc is not compliant with the Compact Disc Digital Audio Specification. Accordingly, the non-DVD side of a DualDisc may not play in Pioneer products.

#### **Displays Specifications**

	AVD-W7900
LCD MONITOR	
Display	Color liquid crystal display TFT active matrix driving system
Display size	7-inch (16:9) wide
Picture size (mm)	154×87
Picture segment (pixels)	336 960 (1 440 × 234)
GENERAL	
DIN chassis dimensions [W × H × D] (mm)	178 × 118 × 32

#### **Hide-Away TV Tuners Specifications**

	GEX-P5750TVP	GEX-P5750TV
TV TUNER		
Color system	TV: PAL/SECAM compatible Video: NTSC/PAL/PAL-M/SECAM compatible	TV: NTSC/PAL-M compatible Video: NTSC/PAL/PAL-M/SECAM compatible
Channel coverage* (ch)	CCIR/B, G, H: VHF 2 to 12 UHF 21 to 69	VHF 2 to 13 UHF 14 to 69
	Indonesia/B, G, H: VHF A to H2 UHF 21 to 69	
	China/D, K: VHF A to K UHF 21 to 69	
	UK, Ireland/I: VHF R1 to R12 UHF 21 to 69	
	OIRT/D, K: VHF 2 to 12 UHF 21 to 69	
	Australia/B, G, H: VHF 0 to 11 UHF 28 to 69	
	South Africa/I: VHF 4 to 11, 13 UHF 21 to 69	
Composite A/V output	Output × 2	Output × 2
GENERAL		
Chassis dimensions [W × H × D] (mm)	172 × 30 × 150	172 × 30 × 150

 $<sup>\</sup>overline{\ ^* \text{Reception channels and TV}} \ \overline{\ ^* \text{Reception system standards are set automatically, according to reception area selected.}}$ 

#### **Multi-Channel Processor Specifications**

	DEQ-P7650
AMPLIFIER	
Max. power output*	50 W × 5
Continuous power output	22 W × 5
GENERAL	
Chassis dimensions $[W \times H \times D]$ (mm)	237 × 29 × 171

<sup>\*</sup>Peak momentary power output

#### **A/V Selector Specifications**

		CD-VS33
VIDEO (composite in	put/output)	
Input/output level (P through outputs from	AL/NTSC/SECAM compatible n video input 1 to 3)	1 Vp-p/75 Ω
GENERAL		
Dimensions	Hide-away unit (Chassis)	160 × 28 × 120
$[W \times H \times D]$ (mm)	Controller	120 × 60 × 32

#### **Audio Master Unit Specifications**

		AXM-P90RS
GENERAL		
Dimensions	Display	165 × 44 × 16.4
$[W \times H \times D]$ (mm)	Hide-away unit (Chassis)	252 × 40 × 152

### **Multi-Channel Processor Controller Specifications**

		AXM-P7650
GENERAL		
Dimensions	Chassis	119 × 37 × 20
$[W \times H \times D]$ (mm)	Hide-away unit (Chassis)	100 × 28 × 136

#### **A/V Units Terminal Comparison**

	AVH-P7950DVD	AVH-P6050DVD	AVH-P5150DVD	AVH-P4150DVD	AVH-P3150DVD	DVH-P4150UB	DVH-3150UB	DEQ.P7650	XDV-P650	AXM-P7650	AVD-W7900
INPUT											
IP-Bus input	•	•	•	•	•	•		•	•	•	
AV-Bus input	•	•							•		
Optical digital input	•							2			
RCA Audio input	2	2(1)	1	1	1	1	1	2		1	2
RCA Video input	2(1)	2(1)	1	1	1	1					2
Audio/Video input (mini jack type)	Audio	Audio	A/V	A/V	A/V <sup>(2)</sup>	A/V <sup>(2)</sup>	Audio <sup>(2)</sup>				
RGB input		•		•							
Rear view camera input <sup>(3)</sup>	•	•	•	•	•						
OUTPUT											
IP-Bus output								•	<b>●</b> <sup>(4)</sup>		
Optical digital output		•	•	•	•	•	•		•		
RCA pre-out	9(5)	3	2	3	2	2	1	6(6)			
RCA Audio output	1								•		1
RCA Video output	1	1	1	1	1	1	1		2(7)		1

<sup>(1)</sup> Input 1: Audio/Video, Input 2: Audio/Video or rear view camera (2) On front panel (3) Camera not included (4) Analog for front (5) 9-channel RCA pre-outs (6) 6-channel RCA pre-outs (7) Front + rear

### **Headunits Features Comparison**

Description	ricadaints i catales e	.ompanson																
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USA direct connection of Frents			- t-q-	611	P.S.	41	31.5	91,	11:	909	현	PG	P2	E E	96	8	9	6
USA direct connection of Frents			蓝	当	<u> </u>	蓝	臣	盖	直	모	Ä	Ä	畫	S C	Ä	畫	S.	
U.S. dispersion of Section which controls   Pri   Pr	LISP/iPad/SD Mamary Card/Plus	tooth® CONTROL	-			-				- 4	0		<u> </u>	ш.			- 4	-
United Teach Control				F(1)	F(1)	F(1)	F(1)	F(1)		•								
USB sets																•		
Direct connection for imbor   Part			•	•	•	•	•	•		•								
Apaper range for Pied (C) History (S) = Assertant unit controls			<b>●</b> (2)	<b>●</b> (2)	<b>●</b> (2)	<b>●</b> (2)				<b>●</b> (2)								
List case for iProd	Direct connection for iPhone			<b>●</b> (2)	<b>●</b> (2)	<b>●</b> (2)												
Like Naty for Bried	Adapter ready for iPod (CD-IB100I	I) <e =="" control="" external="" unit=""></e>	•		•					•			Е	•	Е	•		
Button Students of Students and Students Student				•	•	•												
Bill-to-Bill-windsworth Windess Sethoology  DR JAYER  CD RAYER  CD DAYER  CD CONTROLLED RAYER  CD DAYER  C			<b>●</b> (3)	•	•	•				<b>●</b> (3)								
Blustonth' adapter ready of E - E   E						•												
COPATR   COLOR   COL				•										_	_			
CD-RIVER   STATE   S	. ,	ternal unit control>	•		•					•				E	E	E		
WMA (Mindows Media** Audio) applyacks with WMA Tag**   Splaybade with 100 Tag**		wlane										_						
MP3 playback with ID3 Tag*  Times ANC playback**			•	•		•	•			•	5	5		•	•			
Multiple		layback with wink rag.				•												
WAV file playback**			•			_												
Floiderfile list search (CD-80M)			•	•	•		•	•	•	•						•		
DA Converters with 8x overstampling digital filter <24 = Multi 24-bit,			•	•	•	•	•	•		•						•		
Deputed effect TOP passe Track/manual search Disc exist search Repeat (CD-DA disc/frack, CD-ROM-file/folder) < C = CD-DA only, M = Magazine, D = Disc > D		ling digital filter <24 = Multi 24-bit,	1	1	,		1			1	1				24	D		
Track/manual search			'	'	_ '	_ '		_ '	_ '	'_		_ '			24	ь		
Copause	5													•	•	•		
Track/manual search  Reposet (CD-Dxt discrirack, CD-ROM-file/folder) < C = CD-Dx only,  Reposet (CD-Dxt discrirack, CD-ROM-file/folder) < C = CD-Dx only,  Reposet (CD-Dxt discrirack, CD-ROM-file/folder) < C = CD-Dx only,  Reposet (CD-Dxt discrirack, CD-ROM-file/folder) < D D D D D D D D D D D D D D D D D D				•	•	•	•	•	•	•				•	_	•		
Disc exist search			•	•	•	•	•	•	•	•	•	•		•		•		
Repeat (CDDr. disc/track, CD-ROM; file/folder) < C = CDDr. only,											•	•		•	•			
M = Magazine/disc/track>		Mufile/folder) < C = CD_DA enly																
Random play x Mr		ivi. file/folder) <c =="" cd-da="" offly,<="" td=""><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>M</td><td>M</td><td></td><td>C</td><td>C</td><td>•</td><td></td><td></td></c>	•	•	•	•	•	•	•	•	M	M		C	C	•		
CD eror code transmission capabilities		Disc>	D	D	D	D	D	D	D	D	M/D	M/D		D	D	D		
Check day memory backup	Disc title memory (48 titles)		•	•	•					•				•	•	•		
Last position memory  CD Text  Digital compression  BMX (Birmetric Equalizer)  CASSETTE PLAYER  Radio intercept  TUNER  Supertuner* (IIID+ = Supertuner* IIID+, IIID = Supertuner* IIID, IIID IIID IIID IIID IIID IIID II	CD error code transmission capab	ilities									•	•						
Digital compression											•	•						
Digital compression											•	•						
BMX (Bitmetric Equalizer)			•	•	•	•	•	•	•	•	•	•		•	•	•		
CASSETTE PLAYER										•						•		
Radio intercept   TUNER   Supertuner* (IIID+ = Supertuner* IIID+, IIID = Supertuner* (IIID+   Supertuner* (IIID+   Supertuner* IIID+, IIID									•									
Supertuner* (IIID+ = Supertuner* IIID,   IIID   I																		
Supertuner* (IIID + Supertuner* IIID, IIID													_					
III   Supertune* III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   III   Supertune*   Supertune*   Supertune*   Supertune*   Supertune*   III   Supertune*   Supert		IIID+. IIID = Supertuner® IIID.																
Local seek tuning	III™ = Supertuner® III™)	,	IIID	IIID	IIID	IIID	IIID	IIID	IIID	IIID			•	IIII	IIII	IIID+		
24-station (18 FM/6 AM) presets	BSM (Best Stations Memory)		•	•	•	•	•	•	•	•			•	•	•	•		
9 9   AUDIO   High-precision sound master clock circuitry   Hi-bit conversion   High-power   MOSFET 50 W × 4 (max.)   Untyput   45 W × 4 (max.)   Gold-plated 8-channel RCA output (high/mid/low/subwoofer)   3 RCA pre-outs   Front+ Rear + Non-fading < G = Gold-plated>   Front+ Rear + Subwoofer < G = Gold-plated>   Front+ Rear + Subwoofer (selectable)   Front+ Rear   Front+ Rear   High-voltage pre-out (V)   Rear   High-voltage pre-out (V)   P-Bus input/output <   eliphit   Deptical input < D = with DEX-P90RS, R = with RS-D7RII>   Req Description   Req Description   Red Description   R			•	•	•	•	•	•	•	•			•	•	•	•		
AUDIO High precision sound master clock circuitry Hi-bit conversion High-power MOSFET 50 W × 4 (max.) 45 W × 4 (max.) Gold-plated 8-channel RCA output (high/mid/low/subwoofer) 3 RCA pre-outs Front + Rear + Non-fading •G = Gold-plated> Front + Rear + Subwoofer (selectable) Front + Rear RCA pre-out Rear/Subwoofer (selectable) Rear  High-voltage pre-out (V) 4 4 4 4 4 4 5 4 5 4 4 IP-Bus input/output <  = Input>			•	•	•	•	•	•	•	•			•	•		•		
High precision sound master clock circuitry Hi-bit conversion High-power output  45 W × 4 (max.)  Gold-plated 8-channel RCA output (high/mid/low/subwoofer)  3 RCA pre-outs Front + Rear + Non-fading < G = Gold-plated> Front + Rear + Subwoofer < G = Gold-plated> Front + Rear / Subwoofer (selectable) Front + Rear - Subwoofer (selectable) Front + Rear - Subwoofer (selectable) Rear  High-voltage pre-out (V)  High-voltage pre-out (V)  Quited input/output < I = Input> Rear  Advanced Sound Retriever  DSP/EEQ Built-in DSP (Digital Signal Processor) EEQ (Easy Equalizer) Multi 24-bit Burr Brown D/A Converters		switch <9 = 9 kHz only>	•	•	•	•	•	•	•	•			•	9	9	•		
Hi-bit conversion High-power MOSFET 50 W × 4 (max.) output 45 W × 4 (max.) Gold-plated 8-channel RCA output (high/mid/low/subwoofer) 3 RCA pre-outs Front + Rear + Non-fading <g =="" gold-plated=""> Front + Rear + Subwoofer <g =="" gold-plated=""> G  2 RCA pre-outs Front + Rear/Subwoofer (selectable) Front + Rear  RCA pre-out Rear/Subwoofer (selectable) Rear  High-voltage pre-out (V) 4 4 4 4 4 4 5 4 5 4 4 IP-Bus input/output <i =="" input=""> Optical input/output Optical input/output Optical input/output Optical input/output  Advanced Sound Retriever DSP/EEQ Built-in DSP (Digital Signal Processor) EEQ (Easy Equalizer) Multi 24-bit Burr Brown D/A Converters</i></g></g>																		
High-power output		k circuitry												•				
output       45 W × 4 (max.)         Gold-plated 8-channel RCA output (high/mid/low/subwoofer)       • • •         3 RCA pre-out       Front + Rear + Non-fading <g =="" gold-plated="">       G         Front + Rear + Subwoofer <g =="" gold-plated="">       • • •       G         2 RCA pre-outs       Front + Rear/Subwoofer (selectable)       • • • •       Front + Rear/Subwoofer (selectable)         RCA pre-out       Rear/Subwoofer (selectable)       • • • • • • • • • • • • • • • • • • •</g></g>		A (man)												•	•			
Gold-plated 8-channel RCA output (high/mid/low/subwoofer)  3 RCA pre-outs Front+ Rear + Non-fading <g =="" gold-plated=""> Front + Rear + Subwoofer <g =="" gold-plated=""> G  2 RCA pre-outs Front+ Rear/Subwoofer (selectable) Front + Rear   Subwoofer (selectable) Front + Rear   Subwoofer (selectable) Rear   RCA pre-out   Rear/Subwoofer (selectable) Rear   Rear/Subwoofer (selectable) Rear   I   I   I   I   I   I   I   I   I  </g></g>		+ (IIIdX.)	•	•	•	•	•	•	•	•						•		
3 RCA pre-outs	· is it it i (maxi)	it (high/mid/low/subwoofer)																
Front + Rear + Subwoofer < G = Gold-plated>  2 RCA pre-outs Front + Rear/Subwoofer (selectable) Front + Rear  RCA pre-out Rear/Subwoofer (selectable) Rear  High-voltage pre-out (V) 4 4 4 4 4 4 5 4 5 4 4  IP-Bus input/output <   = Input> I I I I I I I I I I I I I I I I I I I															G		•	
2 RCA pre-out Front + Rear/Subwoofer (selectable) Front + Rear  RCA pre-out Rear/Subwoofer (selectable) Rear  High-voltage pre-out (V)			•		•											G		
Front + Rear   RCA pre-out   Rear/Subwoofer (selectable)						•				•								
Rear	·						•											
High-voltage pre-out (V)	RCA pre-out Rear/Subwoofer	(selectable)		•														
IP-Bus input/output <  = Input>	Rear							•	•				•					
Optical input/output Optical input <d =="" dex-p90rs,="" r="with" rs-d7rii="" with=""> Frequency change: 96 kHz to 44.1 kHz Advanced Sound Retriever DSP/EEQ Built- in DSP (Digital Signal Processor) EEQ (Easy Equalizer) Multi 24-bit Burr Brown D/A Converters</d>															4	5	-	
Optical input <d =="" dex-p90rs,="" r="with" rs-d7rii="" with="">  Frequency change: 96 kHz to 44.1 kHz  Advanced Sound Retriever  DSP/EEQ Built-in DSP (Digital Signal Processor)  EEQ (Easy Equalizer)  Multi 24-bit Burr Brown D/A Converters</d>			ı		- 1					I	I	- 1	I	•	•	- 1	- 1	I
Frequency change: 96 kHz to 44.1 kHz  Advanced Sound Retriever  DSP/EEQ Built-in DSP (Digital Signal Processor)  EEQ (Easy Equalizer)  Multi 24-bit Burr Brown D/A Converters														•	•			
Advanced Sound Retriever  DSP/EEQ Built-in DSP (Digital Signal Processor)  EEQ (Easy Equalizer)  Multi 24-bit Burr Brown D/A Converters																	R	D
DSP/EEQ Built-in DSP (Digital Signal Processor)  EEQ (Easy Equalizer)  Multi 24-bit Burr Brown D/A Converters		KHZ												•				
EEQ (Easy Equalizer) • • • • • • • • • • • • • • • • • • •		sital Signal Processor	•	•	•	•	•	•		•								
Multi 24-bit Burr Brown D/A Converters   ● ●																-	•	•
				•			•		_									•
																•		•

### **Headunits Specifications**

						1-DIN Players				Component Ac	ld-on DSP Units
			DEH-P7150UB	DEH-6150BT	DEH-P5150UB	DEH-4150SD	DEH-3150UB	DEH-2150UBG	DEH-1150MPG	RS-P90	DEQ-P90
CD PLAYER											
S/N ratio [1 kHz, IEC-A N	letwork]	dB	94	94	94	94	94	94	94	_	_
TUNER											
Frequency range	FM	MHz	87.5 to 108	87.5 to 108	87.5 to 108	87.5 to 108	87.5 to 108	87.5 to 108	87.5 to 108	_	_
	AM [10 kHz]	kHz	530 to 1 640	530 to 1 640	530 to 1 640	530 to 1 640	530 to 1 640	530 to 1 640	530 to 1 640	_	_
	[9 kHz]	kHz	531 to 1 602	531 to 1 602	531 to 1 602	531 to 1 602	531 to 1 602	531 to 1 602	531 to 1 602	-	_
FM usable sensitivity [75	Ω, mono, S/N: 30 dB]	dBf	9 [0.7 μV]	9 [0.8 μV]	9 [0.7 μV]	9 [0.7 μV]	11 [0.7 μV]	11 [0.7 μV]	11 [0.7 μV]	_	_
AM usable sensitivity [5	5/N: 20 dB]	μ۷	25	25	25	25	25	25	25	_	_
COMPONENT ADD-ON	I DSP UNIT										
Equalization frequency	,	Hz	_	_	_	_	_	_	_	20 to 20 000	20 to 20 000
Equalization range		dB	_	_	_	_	_	_	_	±12	±12
Distortion [1 kHz, 500 n	nV, 20 KLPF]	%	_	_	_	_	_	_	_	0.002	0.005
Frequency response [-	1 dB]	Hz	_	_	_	_	_	_	_	10 to 20 000	10 to 20 000
S/N ratio [IEC-A networ	k]	dB	_	_	_	_	_	_	_	115	109
Output impedance		Ω	_	_	_	_	_	_	_	220	1 k
Max. output level			_	_	_	_	_	_	_	4.0 V/1 kHz, 1 % dist.	4.0 V/1 kHz, 1 % dist
AUDIO											
Max. power output*			50 W × 4	50 W × 4	50 W × 4	50 W × 4	50 W × 4	50 W × 4	50 W × 4	_	_
Continuous power out	put		22 W × 4	22 W × 4	22 W × 4	22 W × 4	22 W × 4	22 W × 4	22 W × 4	_	_
GENERAL											
Dimensions [W $\times$ H $\times$ D	] DIN—Chassis	mm	178 × 50 × 165	178 × 50 × 162	178 × 50 × 162	178 × 50 × 162	178 × 50 × 162	178 × 50 × 165	178 × 50 × 162	240 × 59 × 240	191 × 49 × 220
	Nose	mm	188 × 58 × 18	$188 \times 58 \times 24$	188 × 58 × 17	188 × 58 × 24	188 × 58 × 22	188 × 58 × 15	188 × 58 × 15	_	_
	D—Chassis	mm	178 × 50 × 165	178 × 50 × 162	178 × 50 × 162	178 × 50 × 162	178 × 50 × 162	178 × 50 × 165	178 × 50 × 162	_	_
	Nose	mm	170 × 45 × 18	170 × 46 × 24	170 × 48 × 17	170 × 46 × 24	170 × 48 × 22	170 × 48 × 15	170 × 48 × 15	_	_

<sup>\*</sup>Peak momentary power output

#### **Headunits Features Comparison**

Headunit	s Features Comparison																
		DEH-P7150UB	DEH-6150BT	DEH-P5150UB	DEH-4150SD	DEH-3150UB	DEH-2150UBG	DEH-1150MPG	FH-P6050UB	CDX-P1280	сох-рево	KEH-P2035	RS-D7RII	DEX-P90RS	DEH-P80RSII	RS-P90	DEQ-P90
		曹	曹	岜	当	曹	曹	当	ΕĒ	<u> </u>	<u>G</u>	帝	Ŕ	留	当	Š	DEC
AUDIO (contir	nued)																
DSP/EEQ	Advanced Segment 24-bit D/A Converter															•	
(continued)	High-performance 32-bit floating binary point type DSP															•	
	High-performance 8× oversampling digital filter													•			•
	5-mode equalizer <p =="" preset=""></p>	Р	Р	Р	Р	Р	Р	Р	Р						Р	•	Р
	Auto EQ														•		
	Auto EQ for 3-way network														•		
	BBE® digital sound processing (5) Digital listening position selector														•		
	Time alignment <a =="" auto=""></a>														A		
	BMX (Bitmetric Equalizer)														•		_
	Digital graphic equalizer <31 = 31-band, 16 = 16-band,																
	7 = 7-band> <l independent="" r="L/R"></l>	7		7					7						16, L/R		31, L/F
	31-band L/R independent equalizer															•	
	3-band parametric equalizer <l independent="" r="L/R"></l>		•		•											L/R	
	L/R independent 3-way crossover: high/mid/low														•		
	3-way digital network														•		
	Parametric bass/treble controls															•	•
4-way indeper	ndent L/R crossover network (high/mid/low/subwoofer)															•	•
Direct Sub Driv	ve	•	•	•	•				•								
Subwoofer co	ntrol	•	•	•	•				•						•		
Loudness <h =<="" td=""><td>= High, M = Mid, L = Low, 2 = 2-mode selectable&gt;</td><td>H/M/L</td><td>H/M/L</td><td>H/M/L</td><td>H/M/L</td><td>H/L</td><td>H/L</td><td>H/L</td><td>H/M/L</td><td></td><td></td><td>2</td><td></td><td></td><td>•</td><td></td><td></td></h>	= High, M = Mid, L = Low, 2 = 2-mode selectable>	H/M/L	H/M/L	H/M/L	H/M/L	H/L	H/L	H/L	H/M/L			2			•		
BTB (Bass/Treb	ole Booster)											•					
Fader		•	•	•	•	•	•	•	•			•	•	•	•		
	ume/balance controls	•	•	•	•	•	•	•	•			•	•	•	•	•	•
	s/treble controls											•		•			
	:B = Bass, M = Mid, T = Treble>					B/M/T	B/M/T	B/M/T					•				
SLA (Source le	-	•	•	•	•	•	•	•	•			•	•	•	•		
Spectrum anal		•		•											•		
	r <l independent="" r="L/R"></l>	•		•											L/R		
Cellular mute		•		•					•				•	•	•		
GENERAL	and an			•					•								
Rotary Comma		•	•	•	•			•	•						•		
Rotary volume		10	10	C	С	C	C	C	C						10		
Wired remote	te controller <10 = 10-key direct access remote, C = Card>	10	10	•	•	•	•	C	C				_	_	10		
	= Auto-slide, F = Flap-type, P = Pop-up>	A	Р	Р	Р	F	Р	Р					Α	Α	Α		
	airline aluminum front panel	Α	r	r	-	Г	r						A	A	Α		
Detachable Fa		•	•		•		•										
Clock <e =="" ent<="" td=""><td></td><td>E</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td></td><td></td><td>•</td><td>•</td><td>•</td><td>E</td><td></td><td></td></e>		E	•	•	•	•	•	•	•			•	•	•	E		
	Organic EL) display <w =="" white=""></w>	W	-	•	-	-	-	_				-	W	W	W		
	ited OEL (Organic EL) display								•								
LCD display (W			•		•	•	•	•									
	ion (white or red selectable)												•				
	B = Brightness, C = Contrast>	В		В									С	С	В		
System contro		•	•	•	•	•	•	•	•			•	•	•	•		
	e guide (English/Spanish/Portuguese)	•		•											•		
Display off sec		•	•	•	•				•				•	•	•		
Source CD con	itrol (External unit control)	•		•					•						•		
Source TV con	trol (Analog tuner control)	•		•					•				•	•	•		
Source DVD co	ontrol	•		•					•				•	•	•		
	control via IP-Bus	2		2					2			1	•	2	2		
Direct AUX-in	AUX-1 <f 20="CD-RB20" =="" front,="" only="" r="Rear,"></f>	R	F	F	F	F	F	F	R				20	20	•		
	AUX-2 <sup>(6)</sup>	•		•					•						•		
	rew-type power/ground terminals															•	•
	minals and square aluminum bonnet															•	
Copper-plated														•			•
	ound cable included												•				
output for dire	izontal/vertical mounting: 0° to 90° (5 steps switchable) • IP-Bus ect headunit connection • Entire chassis anti-vibration system ition with CD-VC60									•	•						
6 m IP-Bus cab										•	•						
	nagazine JD-1212S (one included)									•							
	agazine JD-612V (one included)										•						

Uses 6-disc magazine JD-612V (one included)

(1) Please use CD-U50E USB extension cable if a direct connection causes a USB device to protrude from the headunit in a way that can interfere with driving. (2) CD-IU50 required (3) Artist only (4) With CD-ROM and CD-R/RW discs. (5) BBE: Licensed by BBE Sound, Inc. under USP4638258 and 4482866. BBE and BBE symbol are registered trademarks of BBE Sound Inc. (6) IP-Bus with CD-RB10 or CD-RB20.

#### **Headunits Specifications**

			Con	nponent Single-CD Pla	yers	2-DIN Player	Multi-Cl	) Players	Cassette Player
		Ī	RS-D7RII	DEX-P90RS	DEH-P80RSII	FH-P6050UB	CDX-P1280	CDX-P680	KEH-P2035
CD PLAYER									
S/N ratio [1 kHz, IEC-A network]			_	107	105	94	92	92	_
CASSETTE PLAYER									
Wow & flutter [WRMS]		%	_	_	_	_	_	_	0.13
Tape frequency response [±3 dB]		Hz	_	_	_	_	_	_	30 to 16 000
Tape S/N ratio [IEC-A n	etwork]	dB	_	_	_	_	_	_	52
TUNER									
Frequency range	FM	MHz	87.5 to 108	87.5 to 108	87.5 to 108	87.5 to 108	_	_	87.5 to 108
	AM [10 kHz]	kHz	_	_	530 to 1 640	530 to 1 640	_	_	530 to 1 640
	[9 kHz]	kHz	531 to 1 602	531 to 1 602	531 to 1 602	531 to 1 602	_	_	531 to 1 602
FM usable sensitivity [3	75 Ω, mono, S/N: 30 dB]	dBf	9 [0.8 μV]	9 [0.8 μV]	8 [0.7 μV]	8 [0.7 μV]	_	_	11 [1.1 μV]
AM usable sensitivity [	S/N: 20 dB]	μV	18	18	18	18	_	_	20
AUDIO									
Max. power output*			_	_	50 W × 4	50 W × 4	_	_	45 W × 4
Continuous power out	put		_	_	22 W × 4	22 W × 4	_	_	22 W × 4
GENERAL									
Dimensions [W $\times$ H $\times$ D	] DIN—Chassis	mm	$178\times50\times160$	178 × 50 × 160	$178\times50\times159$	_	257 × 94 × 170**	248 × 66 × 168**	$178\times50\times155$
	Nose	mm	188 × 58 × 20	188 × 58 × 20	188 × 58 × 30	_	_	_	188 × 58 × 20
	Nose D—Chassis		$178\times50\times165$	178 × 50 × 165	$178 \times 50 \times 164$	178 × 100 × 160	_	_	$178 \times 50 \times 160$
	Nose	mm	170 × 45 × 15	170 × 45 × 15	170 × 45 × 25	170 × 94 × 8	_	_	170 × 48 × 15

<sup>\*</sup>Peak momentary power output \*\*Chassis dimensions only

#### **Power Amplifiers Features Comparison**

Tower Ampimers reacutes companison													
				_				با	ب			_	
	ш	<b>-</b>		N N	<b>⊢</b>			So	l sc	l ä		PRS-D1200M	
	8.	8	P 24	40	8			8	201	42(	520	120	) j
	-64	-54	Ä	ļ	Ę	A9	A7	ğ	Ď	Ġ		<u>,</u>	¥ ,
	GM-6400F	GM-5400T	GM-D8400M	GM-D7400M	GM-3300T	RS-A9	RS-A7	PRS-D2000SPL	PRS-D1200SPL	PRS-D4200F	PRS-D2200T	l ë	PRS-A900
Bridgeable 4/3/2-channel capability <f =="" class-fd=""></f>	•						•		_	E	_		•
Bridgeable 2/1-channel capability <f =="" class-fd=""></f>		•			•						F		
Mono amplifier <d =="" class-d=""></d>			D	D				D	D			D	
Current feedback amplifier			D	D		•	•	D	D			D	
Single-ended output circuit			•	•									
L/R independent power supply						•	•						
L/R symmetric layout circuit													
Full balanced system (bridgeable connection)						•	•						
High-performance 32-bit floating binary point type DSP													
Built-in DSP (Digital Signal Processor) (FIR)													
Multi 24-bit Burr Brown D/A Converters													
Variable LPF/HPF (40 Hz to 500 Hz, –12 dB/oct.)													
Variable LPF (40 Hz to 240 Hz, -12 dB/oct.)								•	•				
Variable LPF (40 Hz to 240 Hz, -18 dB/oct.)													
Variable LPF (40 Hz to 240 Hz, -18 dB/oct.)													
LPF/HPF (80 Hz, –12 dB/oct.) for A and B channels	•												
LPF (80 Hz, –12 dB/oct.) for A and B channels  LPF (80 Hz, –12 dB/oct.)													
Input level control (400 mV to 6.5 V) <l independent="" r="L/R"></l>								•					L/R
Input level control (400 mV to 6.5 V)					•			•	•	•	•	•	L/N
Low load impedance capability (4 $\Omega$ , 2 $\Omega$ to 8 $\Omega$ allowable)							•						
Low load impedance capability (417, 217 to 817 allowable)  Low load impedance capability (1 $\Omega$ to 8 $\Omega$ )		•	•	•	•	•	•			•	•		•
Optical digital input						1	2	•					
3 optical digital mput  3 optical digital outputs (mid/low/subwoofer)							2						
IP-Bus input/output							•						
RCA input and output terminals <g =="" gold-plated=""></g>	•(1)					_	_	G	G	G	-	G	
RCA input terminals <g =="" gold-plated=""></g>	0.00		•	•				u	G	G	G	G	G
Screw-type speaker terminals <g =="" gold-plated=""></g>			_	_		G	G						9
Large block-type speaker terminals <g =="" gold-plated=""></g>			(2)	(2)		d	d	G <sup>(3)</sup>	G <sup>(3)</sup>	G <sup>(2)</sup>	G <sup>(2)</sup>	G <sup>(2)</sup>	G <sup>(4)</sup>
Large screw-type power/ground terminals <g =="" gold-plated=""></g>						G	G	G.	G.	G	G	G	G."
Large block-type power/ground terminals <g =="" gold-plated=""></g>			● <sup>(5)</sup>	● <sup>(5)</sup>		d	d	G <sup>(6)</sup>	G <sup>(3)</sup>	G <sup>(5)</sup>	G <sup>(5)</sup>	G <sup>(5)</sup>	G <sup>(5)</sup>
Speaker level input (0.8 V to 26 V)								G.	G.	g	G.	g	G.
Speaker level input (1.6 V to 26 V)					•					•	•	•	
Speaker line input turn-on sensor		•			•					•	•	•	
Bass Boost (40 Hz to 120 Hz, 0 dB to +12 dB variable) <r =="" remote=""></r>								R	R				
Bass Boost (40 Hz to 120 Hz, 0 dB to +12 dB variable) < R = Remote>			R					К	К				
Bass Boost (50 Hz, 0 dB to 12 dB variable) < R = Remote>  Bass Boost (50 Hz, 0 dB/+6 dB/+9 dB/+12 dB) < R = Remote>		<b>●</b> <sup>(7)</sup>	К	<b>●</b> <sup>(7)</sup>							R	R	
		• • •		• • • • • • • • • • • • • • • • • • • •							n	n	
Subsonic filter (20 Hz, -24 dB/oct.)								•	•				
Subsonic filter (20 Hz, –18 dB/oct.) SYNC control												•	
								•	•			•	
PWM regulated power supply with MOSFET switching	•	•						•	•	- (9)	- (9)	- (9)	
High-performance balanced isolator circuit	•	•	•	•	•			•			()	- ()	•
High-efficiency MOSFET output section			•	•				•	•	•	•	•	
Multi Emitter Bipolar Transistor													•
MASS (Multiple Amplifier Synchronization System)  Sound master clock								•	•			•	
						•	•						
DAC volume						•	•				-	_	
All terminals placed on one side										•	•	•	
Removable terminal/settings cover								•	•	•	•	•	
TVC (Total Vibration Control) technology										•	•	•	•
Copper-plated chassis			_			•	•						
Black heatsink with aluminum plate			•	•	•								
Black metallic mesh with silver plate													

(1) Output for A-channel (2) 12 to 16-gauge (3) 4-gauge (4) 12 to 18-gauge (5) 4 to 8-gauge (6) 0/1-gauge (7) Bass Boost level: 0 dB/+6 dB/+12 dB only (8) Input circuit

#### Power Amplifiers Specifications

			ciricatio												
			GM-6400F	GM-5400T	GM-D8400M	GM-D7400M	GM-3300T	RS-A9	RS-A7	PRS-D2000SPL	PRS-D1200SPL	PRS-D4200F	PRS-D2200T	PRS-D1200M	PRS-A900
Max. power	4-channel mo	ode	120 W $\times$ 4 (4 $\Omega$ )	_	_	_	_	100 W $\times$ 4 (4 $\Omega$ )	100 W $\times$ 4 (4 $\Omega)$	_	_	150 W $\times$ 4 (4 $\Omega$ )	_	_	100 W × 4 (4
output [14.4 V]	3-channel mo	ode	$120 W \times 2 +$ $300 W \times 1 (4 Ω)$	_	_	_	_	$100 W \times 2 +$ $300 W \times 1 (4 Ω)$	100 W × 2 + 300 W × 1 (4 Ω)	_	_	150 W × 2 + 600 W × 1 (4 Ω)	_	_	100 W × 2 · 200 W × 1 (4
	2-channel mo	ode	300 W $\times$ 2 (4 $\Omega$ )	250 W $\times$ 2 (4 $\Omega$ )	_	_	120 W $\times$ 2 (4 $\Omega$ )	300 W $\times$ 2 (4 $\Omega$ )	300 W $\times$ 2 (4 $\Omega$ )	_	_	600 W $\times$ 2 (4 $\Omega$ )	300 W $\times$ 2 (4 $\Omega$ )	_	200 W × 2 (4
	1-channel mo	ode	=	760 W × 1 (4 Ω)		400 W × 1 (4 Ω) 800 W × 1 (2 Ω)	300 W × 1 (4 Ω)	_	=	$\begin{array}{c} 1500W\times 1~(4\Omega) \\ 3000W\times 1~(2\Omega) \\ 4000W\times 1~(1\Omega) \end{array}$	2 000 W $\times$ 1 (2 $\Omega$ )	_	1 200 W × 1 (4 Ω)	800 W × 1 (4 Ω) 1 200 W × 1 (2 Ω)	-
Continuous power output	4-channel mo	ode	$\begin{array}{l} 60~\text{W} \times 4~(4~\Omega) \\ 75~\text{W} \times 4~(2~\Omega) \end{array}$	-	-	_	_	$\begin{array}{l} 50~\text{W} \times 4~(4~\Omega) \\ 75~\text{W} \times 4~(2~\Omega) \end{array}$		-	_	75 W × 4 (4 Ω) 150 W × 4 (2 Ω)	_	_	50 W × 4 (4 50 W × 4 (2
14.4 V]	3-channel mo	ode	60 W × 2 + 150 W × 1 (4 Ω)	-	_	-	-	50 W × 2 + 150 W × 1 (4 Ω)	50 W × 2 + 150 W × 1 (4 Ω)	-	-	75 W × 2 + 300 W × 1 (4 Ω)	_	-	50 W × 2 · 100 W × 1 (4
	2-channel mo	ode	150 W $\times$ 2 (4 $\Omega$ )	125 W × 2 (4 $\Omega$ ) 190 W × 2 (2 $\Omega$ )	_	-	$60 \text{ W} \times 2 (4 \Omega)$ $75 \text{ W} \times 2 (2 \Omega)$	150 W × 2 (4 Ω)	150 W $\times$ 2 (4 $\Omega$ )	-	-	300 W × 2 (4 Ω)	150 W $\times$ 2 (4 Ω) 300 W $\times$ 2 (2 Ω)	_	100 W × 2 (4
	1-channel mo	ode	=	380 W × 1 (4 Ω)	300 W × 1 (4 Ω) 600 W × 1 (2 Ω)		150 W × 1 (4 Ω)	=	=	750 W × 1 (4 Ω) 1 500 W × 1 (2 Ω) 2 000 W × 1 (1 Ω)	500 W × 1 (4 Ω) 1 000 W × 1 (2 Ω) 1 200 W × 1 (1 Ω)	_	600 W × 1 (4 Ω)	$400 \text{ W} \times 1 (4 \Omega)$ $600 \text{ W} \times 1 (2 \Omega)$ $600 \text{ W} \times 1 (1 \Omega)^*$	-
requency	+0 dB, -1 dB	Hz	10 to 50 000	10 to 50 000	_	_	10 to 50 000	10 to 100 000	10 to 100 000	_	_	_	_	_	10 to 100 0
esponse	+0 dB, -3 dB	Hz	_	_	10 to 240	10 to 240	_	_	_	10 to 240	10 to 240	10 to 50 000	10 to 50 000	10 to 240	_
	+0.5 dB, -3 dB	3 Hz	_	_	_	_	_	_	_	_	_	_	_	_	_
otal harmonic d	listortion	%	0.03	0.03	0.3	0.3	0.008	0.002	0.002	0.3	0.3	0.005	0.005	0.03	0.003
N ratio [IEC-A n	network]	dB	95	95	80	80	100	105	105	85	80	100	100	92	108
Dimensions (W ×	(H×D)	mm	265 × 62 × 346	265 × 62 × 346	290 × 56 × 200	225 × 56 × 200	300 × 60 × 194	585 × 330 × 71	585 × 330 × 71	586 × 282 × 65	381 × 282 × 65	301 × 57 × 213	301 × 57 × 213	301 × 57 × 213	282 × 65 ×

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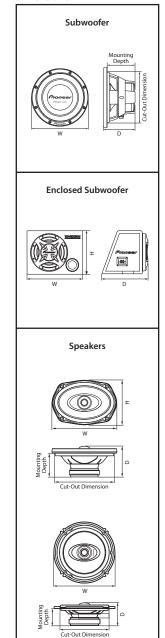
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#### **Subwoofers & Speakers Specifications**

	Size	Max. Input	Nominal Input	Frequency Response	Sensitivity	Impedance	Dimensions (W × H × D)	Mounting Depth	Cut-Out Dimensions
TS-W01RSII	25 cm	300 W	150 W	25 Hz to 3 800 Hz	86 dB	4Ω	ø276 mm × 94 mm	75 mm	ø238 mm
TS-M01RSII	17 cm	120 W	50 W	35 Hz to 12 000 Hz	89 dB	4Ω	ø174 mm × 75 mm	69 mm	ø151 mm
		50 W <sup>(1)</sup>		70 Hz to 24 000 Hz <sup>(1)</sup>			ø90 mm × 42.5 mm <sup>(1)</sup>	37.5 mm <sup>(1)</sup>	ø72.5 mm <sup>(1)</sup>
S-S01RSII	7.7 cm	60 W <sup>(2)</sup>	15 W	120 Hz to 24 000 Hz <sup>(2)</sup>	86 dB	4Ω	ø90 mm × 67 mm <sup>(2)</sup>	60 mm <sup>(2)</sup>	ø77 mm <sup>(2)</sup>
S-T01RSII	3.5 cm	120 W	50 W	1 000 Hz to 48 000 Hz	95 dB	6Ω	ø68 mm × 64 mm	_	_
S-W12PRS	30 cm	1 200 W	300 W	15 Hz to 2 000 Hz	92 dB	2 Ω or 8 Ω	ø322 mm × 152 mm	133 mm	ø278 mm
S-M171PRS	17 cm	200 W	50 W	25 Hz to 9 000 Hz	88 dB	4Ω	ø156 mm × 78 mm	67 mm	ø158 mm
S-S101PRS	10 cm	60 W	15 W	60 Hz to 30 000 Hz	86 dB	40	ø110 mm × 52 mm	46 mm	ø90 mm
S-T031PRS	28 mm	200 W	50 W	1 200 Hz to 32 000 Hz	90 dB	40	ø55 mm × 27.1 mm	12.2 mm	ø47 mm
	17 cm	200 W	50 W	25 Hz to 32 000 Hz	88 dB	40	ø156 mm × 78 mm	67 mm	ø140 mm
rs-C171PRS		200 W				40			
S-C131PRS	13 cm		30 W	35 Hz to 32 000 Hz	88 dB		ø129 mm × 67 mm	57.3 mm	ø121 mm
S-W8102SPL	38 cm	8 000 W	3 000 W	15 Hz to 1 500 Hz	91 dB	1 Ω or 4 Ω	ø400 mm × 359.5 mm	312 mm	ø352 mm
rs-W5102SPL	30 cm	6 000 W	2 500 W	18 Hz to 2 000 Hz	88 dB	1 Ω or 4 Ω	ø327 mm × 304 mm	266 mm	ø278 mm
rs-W3002D4	30 cm	3 500 W	1 000 W	20 Hz to 150 Hz	90 dB	2 Ω or 8 Ω	ø329 mm × 214 mm	188.8 mm	ø278 mm
rs-W2502D4	25 cm	3 000 W	800 W	20 Hz to 150 Hz	89 dB	2 Ω or 8 Ω	ø283 mm × 193 mm	169 mm	ø238 mm
FS-W308D2	30 cm	1 400 W	400 W	20 Hz to 180 Hz	91 dB	2 Ω DVC	ø327 mm × 172 mm	153 mm	ø278 mm
ΓS-W308D4	30 cm	1 400 W	400 W	20 Hz to 180 Hz	92 dB	4 Ω DVC	ø327 mm × 172 mm	153 mm	ø278 mm
TS-W258D2	25 cm	1 200 W	350 W	20 Hz to 450 Hz	90 dB	2 Ω DVC	ø277 mm × 162 mm	143 mm	ø238 mm
S-W258D4	25 cm	1 200 W	350 W	20 Hz to 450 Hz	90 dB	4ΩDVC	ø277 mm × 162 mm	143 mm	ø238 mm
ΓS-W308F	30 cm	1 000 W	300 W	20 Hz to 1 100 Hz	95 dB	4Ω	ø327 mm × 162 mm	143 mm	ø302 mm
S-W258F	25 cm	800 W	250 W	20 Hz to 1 400 Hz	92 dB	4Ω	ø277 mm × 150 mm	131 mm	ø255 mm
S-W302R	30 cm	800 W	150 W	20 Hz to 90 Hz	97 dB	4Ω	ø327 mm × 164 mm	145 mm	ø278 mm
S-W252R	25 cm	600 W	120 W	20 Hz to 110 Hz	97 dB 95 dB	4Ω	Ø277 mm × 154 mm	135 mm	Ø278 IIIII Ø238 mm
S-SW3001S2	30 cm	1 500 W	400 W	20 Hz to 230 Hz	93 dB	2Ω	ø329 mm × 100 mm	81 mm	ø278 mm
S-SW3001S4	30 cm	1 500 W	400 W	20 Hz to 230 Hz	93 dB	4Ω	ø329 mm × 100 mm	81 mm	ø278 mm
rs-SW2501S2	25 cm	1 200 W	300 W	20 Hz to 290 Hz	90 dB	2Ω	ø282 mm × 93 mm	75.1 mm	ø238 mm
FS-SW2501S4	25 cm	1 200 W	300 W	20 Hz to 290 Hz	90 dB	4Ω	ø282 mm × 93 mm	75.1 mm	ø238 mm
rs-SW841D	20 cm	500 W	120 W	30 Hz to 1 500 Hz	85 dB	4Ω	ø218.4 mm × 75.2 mm	63.5 mm	ø186 mm
ΓS-SW301	30 cm	1 000 W	250 W	20 Hz to 114 Hz	91 dB	4Ω	ø327 mm × 100 mm	86 mm	ø278 mm
ΓS-SW251	25 cm	800 W	200 W	20 Hz to 144 Hz	89 dB	4Ω	ø278 mm × 92 mm	78 mm	ø238 mm
ΓS-WX301	30 cm	800 W	150 W	20 Hz to 400 Hz	95 dB	4Ω	501 mm × 389 mm × 415 mm	_	_
rs-wx11A	13 cm × 21 cm	150 W <sup>(3)</sup>	50 W <sup>(4)</sup>	54 Hz to 200 Hz	101 dB <sup>(5)</sup>	_	280 mm × 80 mm × 200 mm	_	_
rs-wx22A	20 cm	150 W <sup>(3)</sup>	60 W <sup>(4)</sup>	40 Hz to 200 Hz	101 dB	_	250 mm × 265 mm × 110 mm	_	_
TS-WX22A	20 cm	150 W	60 W <sup>(4)</sup>	35 Hz to 200 Hz	107 dB <sup>(5)</sup>		274 mm × 316 mm × 412 mm		
13-WAZUUA		130 W	90 W	33 HZ (0 200 HZ	107 Ub.	_	2/4 IIIII × 316 IIIII × 412 IIIIII	-	_
TS-D1720C	17 cm 28 mm <sup>(6)</sup>	260 W	60 W	30 Hz to 33 000 Hz	88 dB	4Ω	ø156 mm × 81.9 mm	64.5 mm 51 mm <sup>(6)</sup>	ø144 mm
	13 cm								
TS-D1320C	28 mm <sup>(6)</sup>	180 W	35 W	35 Hz to 33 000 Hz	88 dB	4Ω	ø129 mm × 63.4 mm	57.5 mm	ø121 mm
TS-D6902R	6"×9"	360 W	80 W	28 Hz to 30 000 Hz	90 dB	4Ω	237 mm × 106.2 mm × 163 mm	89 mm	220 mm × 151 m
TS-D1702R	17 cm	280 W	60 W	30 Hz to 32 000 Hz	87.5 dB	4Ω	ø156 mm × 81.9 mm	64.5 mm	ø144 mm
TS-D1602R	16 cm	260 W	60 W	35 Hz to 32 000 Hz	88 dB	4Ω	ø161 mm × 80.4 mm	59 mm	ø128 mm
TS-D1302R	13 cm	180 W	35 W	35 Hz to 40 000 Hz	88 dB	4Ω	ø129 mm × 67.8 mm	57.5 mm	ø121 mm
TS-D1002R	10 cm	110 W	25 W	40 Hz to 40 000 Hz	86 dB	4Ω	ø125 mm × 46.2 mm	46.5 mm	ø106 mm
TS-A1702C	17 cm 23 mm <sup>(6)</sup>	230 W	50 W	31 Hz to 35 000 Hz	90 dB	4Ω	ø156 mm × 68.5 mm	62.5 mm 49.5 mm <sup>(6)</sup>	ø139 mm
S-A1302C	13 cm 23 mm <sup>(6)</sup>	180 W	35 W	36 Hz to 30 000 Hz	90 dB	4Ω	ø129 mm × 58.9 mm	53 mm	ø121 mm
S-A6993S	6"×9"	460 W	80 W	30 Hz to 37 000 Hz	92 dB	4Ω	237 mm × 163 mm × 109 mm	85 mm	151 mm × 220 n
rs-A6983S	6"×9"	440 W	80 W	30 Hz to 31 000 Hz	92 dB	4Ω	237 mm × 163 mm × 108 mm	84 mm	151 mm × 220 m
		440 W	80 W	30 Hz to 31 000 Hz	92 dB 91 dB	4Ω		84 mm 84 mm	
S-A6973E	6"×9"						237 mm × 163 mm × 104.6 mm		151 mm × 220 n
FS-A6963E	6"×9"	300 W	40 W	30 Hz to 36 000 Hz	91 dB	4Ω	237 mm × 163 mm × 91.6 mm	72 mm	151 mm × 220 n
S-A6872R	6"×8"	240 W	40 W	35 Hz to 32 000 Hz	90 dB	4Ω	203.7 mm × 145 mm × 72.5 mm	62 mm	191 mm × 133 m
ΓS-A2503i	25 cm	420 W	80 W	20 Hz to 31 000 Hz	92 dB	4Ω	ø285 mm × 152 mm	115 mm	ø236 mm
S-A2003i	20 cm	400 W	80 W	27 Hz to 32 000 Hz	90 dB	4Ω	ø244 mm × 132 mm	96 mm	ø202 mm
ΓS-A1683S	16 cm	280 W	50 W	36 Hz to 28 000 Hz	91 dB	4Ω	ø160 mm × 75 mm	57 mm	ø128 mm
ΓS-A1673S	16 cm	220 W	35 W	37 Hz to 25 000 Hz	91 dB	4Ω	ø160 mm × 64 mm	44 mm	ø128 mm
ΓS-G1642R	16 cm	180 W	30 W	40 Hz to 30 000 Hz	90 dB	4Ω	ø158 mm × 55 mm	42 mm	ø142 mm
ΓS-G1612R	16 cm	160 W	30 W	30 Hz to 25 000 Hz	90 dB	4Ω	ø158 mm × 55 mm	44 mm	ø142 mm
S-G1342R	13 cm	140 W	25 W	40 Hz to 25 000 Hz	89 dB	4Ω	ø149 mm × 57 mm	46 mm	ø129 mm
S-G1312R	13 cm	130 W	25 W	30 Hz to 25 000 Hz	89 dB	40	ø149 mm × 49 mm	46 mm	ø129 mm
S-G1042R	10 cm	120 W	25 W	35 Hz to 30 000 Hz	87 dB	40	ø125 mm × 43 mm	43 mm	ø106 mm
			20 W		87 dB				
TS-G1012R	10 cm	110 W		35 Hz to 29 000 Hz		4Ω	ø125 mm × 43 mm	43 mm	ø106 mm
ΓS-2150	20 cm	200 W	50 W	28 Hz to 28 000 Hz	91 dB	4Ω	238 mm × 238 mm × 176 mm	88 mm	ø186 mm
TS-S250	40 mm	250 W	50 W	6 000 Hz to 40 000 Hz	97 dB	8Ω	ø44 mm × 24 mm	_	_
TS-S20	20 mm	200 W	50 W	3 000 Hz <sup>(7)</sup> /	92 dB	8Ω	85.5 mm × 73.5 mm × 32.8 mm	_	_
				1 200 Hz <sup>(8)</sup> to 26 000 Hz					
ΓS-T110	22 mm	120 W	40 W	2 500 Hz to 30 000 Hz	90 dB	4Ω	ø47.1 mm × 20.5 mm	_	_
S-T15	20 mm	120 W	40 W	2 500 Hz to 30 000 Hz	90 dB	4Ω	ø37.5 mm × 18.9 mm	_	_
S-CX900	6.6 cm	80 W	20 W	80 Hz to 70 000 Hz	85 dB	4Ω	98 mm $\times$ 120.5 mm $\times$ 41 mm	_	_
S-MR2040	20 cm	200 W	40 W	25 Hz to 30 000 Hz	92 dB	4Ω	ø230 mm × 115 mm	75 mm	ø186 mm
ΓS-MR1640	16 cm	160 W	30 W	30 Hz to 30 000 Hz	91 dB	4Ω	ø175 mm × 84.5 mm	56 mm	ø130 mm
	16 cm	100 W	25 W	30 Hz to 20 000 Hz	90 dB	4Ω	ø175 mm × 84.5 mm	56 mm	ø130 mm

#### Dimensions



#### Subwoofer Thiele-Small Parameters\*

		TS-W01RSII**	TS-W12PRS**	TS-W8102SPL	TS-W5102SPL	TS-W3002D4	TS-W2502D4	TS-W308D2	TS-W308D4	TS-W258D2	TS-W258D4	TS-W308F	TS-W258F	TS-W302R	TS-W252R	TS-SW3001S2	TS-SW3001S4	TS-SW2501S2	TS-SW2501S4	TS-SW841D	TS-SW301	TS-SW251
Recommended	cu.ft.	0.49 to 0.99	1.0	2.5	1.5	0.80	0.60	1.25	1.25	0.80	0.80	_	_	1.5	1.00	0.65	0.65	0.45	0.45	0.15 to 0.5	0.65	0.45
enclosure	liters	17	28.3	70.8	42.5	22.64	16.98	35.4	35.4	22.6	22.6	-	_	42.5	28.3	18.4	18.4	12.7	12.7	4.2 to 14.2	18.4	12.7
Revc	Ω	3.0	1.8/7.2	3.0	3.0	DUAL3.3	DUAL3.3	DUAL1.5	DUAL3.2	DUAL1.5	DUAL3.0	3.0	3.0	3.0	3.0	1.5	3.0	1.5	3.0	3.3	3.0	3.0
Levc	mH	0.641	0.4/1.61	5.560	5.090	5.55 (8 Ω) 1.39 (2 Ω)	4.80 (8 Ω) 1.20 (2 Ω)	2.18 (4 Ω) 0.65 (1 Ω)	3.76 (8 Ω) 1.30 (2 Ω)	2.2 (4 Ω) 0.63 (1 Ω)	3.59 (8 Ω) 1.07 (2 Ω)	1.237	1.101	1.380	1.370	1.300	2.900	0.880	2.520	0.996	2.4	2.4
Fs	Hz	23.5	24	23.2	29.0	31.4	36.0	33.7	34.5	37.4	40.5	26.3	34.5	28.0	28.9	36.8	35.1	44.4	41.6	67.5	34.9	41.3
Zmax	Ω	50.4	43.8/175	58.56	70.62	157.77 (8 Ω) 38.53 (2 Ω)	133.73 (8 Ω) 32.72 (2 Ω)	99.13 (4 Ω) 24.81 (1 Ω)	177.44 (8 Ω) 45.58 (2 Ω)	96.01 (4 Ω) 19.95 (1 Ω)	147.55 (8 Ω) 38.80 (2 Ω)	28.80	29.30	35.78	47.38	27.39	59.41	21.29	46.51	25.21	28.21	28.77
Qms		5.72	9	5.720	7.600	15.13	14.34	14.11	16.43	11.52	13.64	7.910	9.300	8.120	9.130	13.210	13.800	12.790	13.210	11.159	9.040	9.870
Qes		0.38	0.41	0.330	0.360	0.68	0.78	0.50	0.65	0.50	0.61	0.880	1.170	0.790	0.730	0.880	0.780	1.090	1.000	1.923	1.140	1.150
Qts		0.36	0.39	0.310	0.340	0.65	0.74	0.48	0.62	0.48	0.58	0.800	1.040	0.720	0.680	0.820	0.740	1.000	0.930	1.641	1.020	1.090
Vas	cu.ft.	2.46	3.3	2.479	0.944	0.460	0.240	1.28	1.22	0.620	0.550	3.380	1.670	3.679	2.045	0.634	0.703	0.320	0.363	0.067	0.702	0.345
	liters	69.8	93	70.14	26.72	13.03	6.77	36.16	34.68	17.63	15.47	95.66	47.32	104.12	57.86	17.96	19.90	9.06	10.27	1.89	19.866	9.754
Rms	Ns/m	2.93	2.3	20.367	13.470	5.334	4.602	2.773	2.426	2.920	2.601	2.732	2.040	2.293	1.686	4.492	4.071	3.922	3.576	4.063	6.820	5.430
Mms	g	102	135	800.11	550.50	408.83	291.71	184.95	184.17	143.28	139.43	131.00	87.50	110.82	84.73	256.62	255.35	179.16	179.79	106.67	281.19	206.57
Cms	m/N	3.70E-04	3.15 × 10 <sup>-4</sup>	6.00 × 10 <sup>-5</sup>	5.350 × 10 <sup>-5</sup>	6.29E-05	6.66E-05	1.20E-04	1.20E-04	1.30E-04	1.10E-04	2.800E-04	2.400E-04	3.100E-04	3.600E-04	7.300E-05	8.100E-05	7.200E-05	8.100E-05	5.207 × 10 <sup>-5</sup>	7.400E-05	7.100E-05
BL	T•m	12.0	9.73/19.45	33.640	30.180	28.38 (8 Ω) 14.19 (2 Ω)	24.16 (8 Ω) 12.08 (2 Ω)	16.07 (4 Ω) 8.04 (1 Ω)	20.37 (8 Ω) 10.14 (2 Ω)	14.68 (4 Ω) 7.34 (1 Ω)	19.39 (8 Ω) 9.65 (2 Ω)	9.350	7.860	8.670	8.650	10.830	15.140	8.790	12.440	9.349	13.09	11.78
Sd	sq. ft.	0.383	0.041	0.988	0.630	0.471	0.337	0.495	0.495	0.337	0.337	0.527	0.377	0.528	0.364	0.533	0.533	0.377	0.377	0.222	0.517	0.369
	sq. m	3.56E-02	0.0456	9.18E-02	5.85E-02	4.37E-02	3.13E-02	4.60E-02	4.60E-02	3.13E-02	3.13E-02	4.90E-02	3.50E-02	4.91E-03	3.38E-02	4.95E-02	4.95E-02	3.50E-02	3.50E-02	2.06E-02	4.80E-02	3.43E-02
Hvc	inch	0.93	1.56	2.392	2.087	1.96	1.68	1.08	1.20	1.21	1.68	1.260	1.209	0.799	0.799	1.055	0.850	0.937	0.815	0.594	1.213	0.900
	mm	23.6	39.50	61	53	49.8	42.7	27.4	30.6	31	42.7	32	31	20.3	20.3	27	22	24	21	15	31	23
Hag	inch	0.354	0.47	1.181	1.181	0.94	0.91	0.39	0.39	0.39	0.91	0.394	0.394	0.236	0.236	0.394	0.394	0.394	0.394	0.315	0.394	0.394
-	mm	9	12	30	30	24	23	10	10	10	23	10	10	6	6	10	10	10	10	8	10	10
Xmax	inch	0.287	0.067	0.61	0.45	0.51	0.39	0.34	0.41	0.41	0.45	0.3	0.3	0.35	0.31	0.33	0.23	0.28	0.22	0.14	0.43	0.26
	mm	7.3	1.89	15.4	11.5	12.9	9.8	8.7	10.3	10.4	11.5	8.5	8.5	8.8	7.8	8.4	5.8	7.0	5.5	3.5	10.8	6.6

<sup>\*</sup>Parameter values for reference. \*\* See page 35 or 36 for product details.

#### Glossarv

#### **Headunit Section**



Advanced Sound Retriever Details on pages 7, 15 and 25.



AUX-In Connection Details on pages 10, 15 and 27.



BBE

BBE" digital
BBE" adds a longer delay time to the lower frequencies
and slightly "boosts" the high range which tends to
become attenuated, so that it recovers its natural
articulation. The result: greater live presence with the
brilliance and clarity of the original sound.



Bluetooth® Bluetooth® Wireless Technology
Details on page 23.



CD-R/RW Compatibility
All Pioneer CD headunits can play back CD-R/RW discs, allowing the user to enjoy favorite compilations in-car.



Compact Disc Digital Video
Compact Disc Digital Video is comprised of animated, or moving, images compressed in MPEG 1 format on a Video CD.



Detachable Face Security™ (DFS)

Detachable Face SecUnity" (DFs)
A theff-deterrent system invented by Pioneer which revolutionized headunit security. With DFS, you simply lift off the front panel (face) of the unit, slip it into a protective case and take it with you. The unit's sensitive electronics remain protected in the dash, all that remains visible from the dash is a black panel that won't attract thieves.



DSP Digital Signal Processor
DSP uses digital technology to correct a vehicle's interior
acoustics. The system also offers various sound fields to
recreate different listening environments in your car
(Studio, Jazz, Club, etc.).



Direct Connection for iPod Details on pages 7, 15 and 26.



Direct Connection for iPhone Details on pages 7, 15 and 26.



DivX\* Digital Media
Among the world's most popular video technologies, the
DivX digital format, based on MPEG-4 data compression
standards, is doing for video what MP3 did for audio—
it lets anyone create, share and play video in the form
of downloadable files that can be quickly, conveniently
exchanged among PCs and on the Internet without
compromising the quality and integrity of original
source material.



Dolby\* Digital

This breakthrough technology offers \*5.1 channels\*—five discrete channels (front left and right, center, and rear left and right) spanning frequencies from 20 Hz to 20 kHz, plus a low-frequency effects channel dedicated to frequencies of 120 Hz or below. These create an acoustic environment in which sound seems to move all around the listener, for supremely dramatic surround sound reproduction.



Dolby Pro Logic\* II

DIGITALEX | Owners sound from 2-channel recorded sources (i.e. CD, PRO LOGIC\* II

DOLBY | Owners sound from a channel recorded sources (i.e. CD, PRO LOGIC\* II

DOLBY | Owners sound from a channel recorded sources (i.e. CD, PRO LOGIC\* II

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Sound from a channel re



DTS™ (Digital Theater Systems)
Six-channel DTS sound captures the glory of digital
surround sound. Featuring low data compression and
a high data transfer rate, DTS technology ensures
excellent localization throughout a vast frequency
and dynamic range.



In addition to playing video DVDs, the DVD-Audio format provides audio fidelity far superior to that of normal CDs. In addition to audio in stereo and multi-channel surround sound, DVD Audio discs can hold artist bios, background information, lyrics and liner notes.



DVD-R/RW Compatibility
Pioneer DVD players can playback large-capacity
DVD-R/RW discs.



**DVD Video** 

DVD video
DVD technology ensures second-to-none picture quality.
Ultra-sharp digital picture and surround sound bring
impressive cinema into your car. According to its software
format, a DVD is packed with useful benefits such as
multiple languages, soundtracks, subtitles and support
for various multi-channel audio encoding technologies
including DTS<sup>TM</sup> and Dolby\* Digital.



Easy Equalizer
Details on page 28.



Front USB Direct Connection USB Direct Connection
Details on pages 15, 24 and 26.



High-Voltage Pre-out
Pioneer's High-Voltage Pre-out maximizes signal strength
to your amp. The benefits are superior dynamics, crisper
highs, more full-bodied bass, and a higher signal-to-noise
ratio for minimal noise interference attributable to



IP-Bus Control
The IP-Bus connections on Pioneer headunits allow the user to connect optional source units such as a TV tuner, DVDV player, Multi-CD player or even an IPod and create a true mobile multimedia center.



iTunes AAC (Advanced Audio Coding)
Advanced Audio Coding (AAC) is a wideband audio code
that dramatically reduces the amount of data needed to
convey high-quality digital audio.





MP3
Popular compression format that allows large amounts of audio files to be stored onto one CD-R/RW disc. Pioneer players come equipped with buffering capabilities, so they are all able to handle data rates from 16 kbps and VBR (Variable Bit Rate) recording.



OEL (Organic EL) Display

• Full Dot OEL

Details on page 25.

Segmented OEL
 Details on page 29.

PAL / PAL-M / NTSC / SECAM

PAL/PAL-M/NTSC/SECAM
PAL, PAL-M, NTSC and SECAM are TV reception standards

3 RCA 2 RCA

1 RCA

RCA Pre-out
The standard connection system to carry sound from a headunit to an amplifier or equalizer. RCA pre-outs provide easy output for connection to an outboard amplifier.



**Subwoofer Control**A function built into the headunit allows adjustment of subwoofer frequency.

SUPERSTUNERII 77+

SUPER TUNERII 7 SUPERSTUNER III

SUPER TUNER

Supertuner\* IIID\*/Supertuner\* IIID/
Supertuner\* III"\*/Supertuner\*
Beyond the minimal sound interference and resistance to
Three Signal Intermodulation (TSI) of Ploneer's Supertuner\*
line, Supertuner\* IIID advanced analog and digital blocks
assure sound superiority and smoothly extend reception.
Supertuner\* IIID Pofeatures FM Multi-path Canceller for
improved stereo separation; AM Noise Canceller with
HI-Speed Gate control counteracting external noise; and
Automatic Reception Control to strengthen weak signals.



Touch Panel Operation Details on pages 7 and 12.



WMA (Windows Media™ Audio)
WMA is a music compression format developed
by Microsoft Corporation. It uses the alatest coding
technologies to compress an original audio track,
minimizing file sizes while maintaining good audio
quality, even at rates as low as 64 kbps.

#### **Amplifier Section**

Bass Boost
Bass Boost offers a choice among bass levels, spanning the range from 0 dB to 12 dB in 2 dB increments, for each speaker (including subwoofer) of a system. This provide more control over the overall balance of sound, to suit listener taste and style of music.

Class FD ICE Class-FD ICEpower Amplifiers
Details on page 38.

High Pass Filter
Low-range sound is filtered off according to user-set cut-off frequency. Mid- and high-range sounds are transferred to the speaker.



Mid- and high-range sounds are filtered off according to user-set cut-off frequency. Low-range sound is transferred to the woofer.



RCA Input RCA input can be connected with headunit featuring RCA output for preamp signal.

RCA Input/Output
RCA input can be connected with a headunit featuring
RCA output for preamp signal. RCA output can be
connected with additional ampliflers for a multi-amp system configuration



Speaker Level Inputs
This allows a Pioneer amplifier to be connected to an OEM radio without requiring costly add-on adapters. The added flexibility allows your Pioneer amplifier to be a part of your system as it grows.

#### Subwoofer & Speaker Section



Air Suspension System
Details on pages 45 and 49.

ib-FLAT ib-FLAT Details on page 48.



IMPP (Injection-Molded Polypropylene)

IMPP (Injection-Molded Polypropylene)
Composite Cone
Pioneer uses a special injection molding process rather
than "pressing" polypropylene speaker cones. This process
ensures uniform cone thickness for superior linearity and
clarity. What's more "pioneer" s'Composite" technology
guarantees the perfect mix of polypropylene and carbon
fiber, graphite and other materials to optimize the speaker
cone for its specific application (woofers, midranges,
tweeters, etc.).



**KEVLAR®** Brand Fiber

Characterized by lightness, strength, and low resonance to powerful input, KEVLAR® Brand Fiber is excellent for speaker diaphragms, helping to produce more detailed, accurate sound.



Open & Smooth Details on pages 39 and 50.



VCCS (Voice Coil Cooling System)

VCCS (Voice Coil Cooling System)
Typically, the longer and louder you play your subwoofer,
the hotter it gets. This changes its electrical and mechanical
characteristics and adversely affects sound quality, Pioneer's
Voice Coil Cooling System (VCCS) draws heat away from
the inside of the subwoofer, reducing temperatures by up
to 30°C. In the simplest terms, it keeps your sound crisp
and your subwoofer from losing its cool.



Printed with soy ink.



Pioneer Corporation Meguro Headquarters and the Kawagoe Plant have acquired ISO 14001 certification.

For more information, call or write to:



#### PIONEER CORPORATION

4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan

Visit us on the World Wide Web at

### http://pioneer.jp http://www.pioneer.com.sg

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